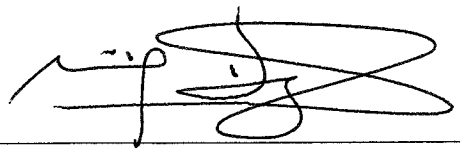
Canadian Institutes of Health Research

Performance Report

for the fiscal year

2004-2005

Submitted to the
Parliament of Canada
by



Ujjal Dosanjh
Minister of Health

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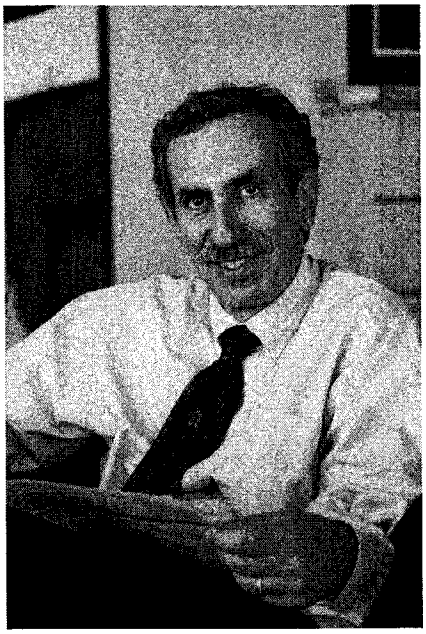
President's Message



Canadians care very deeply about their own health, the health of their loved ones and the sustainability and quality of the Canadian health care system. It was with this in mind that Parliamentarians created the Canadian Institutes of Health Research (CIHR) five years ago.

It has been my privilege to lead this wonderful new organization over its first five years. CIHR was given a broad mandate with a problem-based and strategic approach to health and our health care system, building on a strong foundation of research excellence. Now, from the vantage point of five years later, I am proud to say that we've taken tremendous strides forward since our inception on June 7, 2000. In that brief period, Canada has built a brand new organization and health research community that has become a model for the world.

CIHR-funded researchers span the full spectrum of health research, from biomedical research to clinical, to health services and policy research, to population health research. Members of these widely varying communities are working together, each bringing to bear his or her perspective to strengthen the whole.

Our thirteen Institutes have built strong health research communities, bringing together partners, researchers and research users, to work jointly to set strategic priorities for research and to ensure that Canadians reap the benefits of research.

On all key indicators – number of grants, average value of grants, number of strategic initiatives, number of institutions with CIHR-funded researchers – CIHR has shown a steady pattern of growth over five years. While the increases in these key indicators help us to demonstrate how we spend the increased resources we have received, we are also becoming more outcome-driven in an effort to demonstrate to Canadians the full value of health research, and will be embarking shortly on a major initiative to show the return on investment from health research.

The results of CIHR-funded research are making an impact on health promotion, prevention, diagnosis and treatment in areas as varied as heart disease, cancer and child health.

None of our successes to date could have happened without the involvement of our many partners in the voluntary health sector, universities, hospitals and research institutions, industry, and the provinces, and that of the thirteen Scientific Directors who have guided our Institutes through their first five years.

Our successes also could not have happened without the sustained support of the Government of Canada. In each of the past five years, including times of fiscal restraint, the Government has provided CIHR with an increase to its annual budget. This expression of confidence has been much appreciated by all members of the health research community.

Finally, CIHR is only as good as the researchers it supports. I thank researchers from across Canada for their dedication to excellence in health research.

Dr. Alan Bernstein, O.C., FRSC
President, Canadian Institutes of Health Research

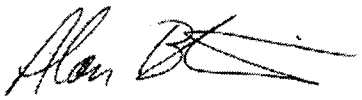
Management Representation Statement

I submit, for tabling in Parliament, the 2004-2005 *Departmental Performance Report* (DPR) for the Canadian Institutes of Health Research (CIHR).

This document has been prepared based on the reporting principles contained in the Treasury Board of Canada Secretariat's Guide for the preparation of 2004-2005 Departmental Performance Reports:

- It adheres to the specific reporting requirements;
- It uses an approved Business Lines structure;
- It presents consistent, comprehensive, balanced and accurate information;
- It provides a basis of accountability for the results pursued or achieved with the resources and authorities entrusted to it; and
- It reports finances based on approved numbers from the Estimates and the Public Accounts of Canada.

Signed:



Dr. Alan Bernstein, O.C., FRSC
President, Canadian Institutes of Health Research

Date: September 6, 2005

How This Report Is Structured

The *Departmental Performance Report* of the Canadian Institutes of Health Research (CIHR) is structured as follows:

Section One, **Overview**, begins with the President's Message and the Management Representation Statement, followed by a summary of the core information that is reported in detail in subsequent sections of the report. This section presents a conceptual model of the organization, followed by *CIHR at a Glance*, highlighting the mission, values, strategic directions, structure and resources. Section One continues with two tables presenting total financial and human resources for fiscal year 2004-2005.

The section then offers a 'report card' that visually represents the current status of progress against plans and priorities in each Outcome area as set out in the *Report on Plans and Priorities* (RPP) 2004-2005. A 'report card' status is provided for each priority area of activity under each Outcome, rather than a single 'grade', offering a more transparent accounting of progress in each Outcome. While 'successfully achieved' is accurate for most activities at the program level, this would not reflect activities that exceeded planned expectations, nor would it capture individual activities that may have made significant progress but had not been fully achieved during the reporting period.

Section One concludes with an overview of CIHR's overall performance. This includes a summary of the organization's operating environment and strategic context, i.e., key factors that may have an impact on the way CIHR's programs are delivered. It also includes a graphic representation of "why health research matters to Canadians."

Section Two, **Analysis by Strategic Outcome Area**, provides detailed information to illustrate activities undertaken and progress accomplished in each Outcome area. It should be noted that CIHR organizes plans and priorities in its RPP by three Strategic Outcome areas that are supported by two Enabling Outcome areas. Reports are provided in this DPR for all five Outcome areas.

At this time, CIHR is in the final stages of approval of a *Management, Resources and Results Structure* (MRRS). Once approved, the MRRS framework will facilitate the identification and collection of inputs and resources in relation to intended results at all levels of activity.

Section Three, **Supplementary Information**, consists of financial and other information as required by Treasury Board.

Throughout the report are URLs and hyperlinks both to CIHR's website and to websites of external partners and other organizations. Readers are encouraged to visit these sites for more information.

How performance information is gathered and used at CIHR

The performance information used in this report is gathered from multiple internal sources including the Vice Presidents and senior managers responsible for carrying out the commitments set out in the 2004-2005 *Report on Plans and Priorities* (RPP). Managers report back on the actions taken and the results they have achieved. The Evaluation and Analysis Unit uses this information to write the report and also provides quantitative data held on a corporate wide basis in the central CIHR funding database.

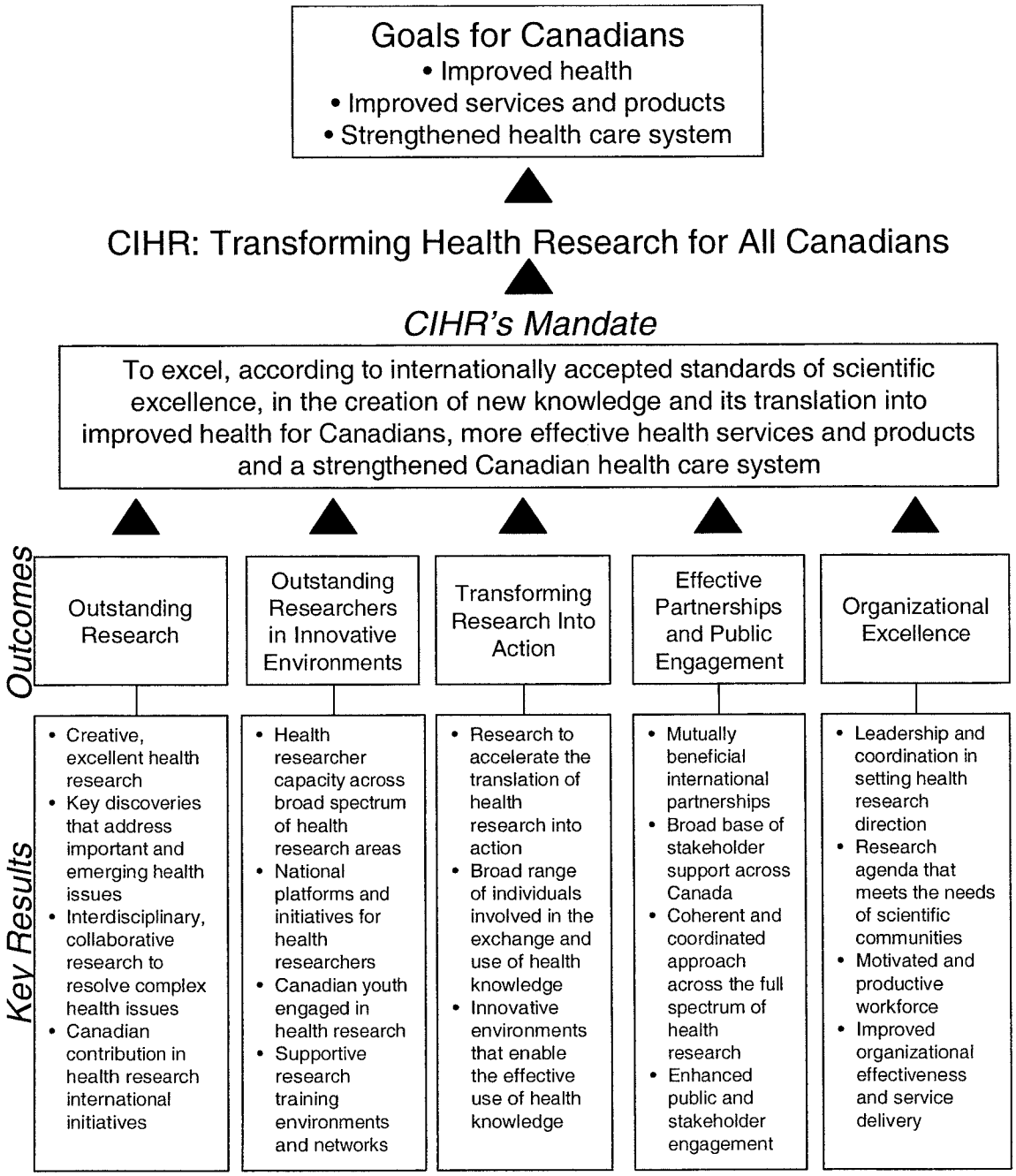
Financial information is generated from the Finance branch using the CIHR financial management system. These numbers are verified internally and the financial statements are audited by the Office of the Auditor General.

CIHR is a health research funding agency and this poses some unique challenges by way of reporting on outcomes; research may take years to produce results for Canadians. In addition, the research is conducted by means of grant funding to researchers in universities and hospitals and thus outcome data must be gathered from the researchers themselves. While CIHR is making progress towards reporting on results, much of the information presented in this report deals with the outputs and activities of CIHR and with the early outcomes achieved. We will continue to move towards outcome reporting over time as we increase our collection of outcome information.

Financial performance information is carefully monitored to ensure financial commitments are met and expenditures accounted for. Through the departmental performance reporting process senior managers are held accountable to report back on the commitments they have made for the previous year. Performance information is used for operating decisions and for communication with stakeholders. Performance information generated through audits and evaluations are also used to create or amend policies and/or procedures and renew or change program designs.

Summary Information

The following graphic (from CIHR's *Report on Plans and Priorities* 2004-2005) illustrates the relationship between key results, outcome areas, mandate, and broad goals benefiting Canadians.



CIHR at a Glance

Role and Leadership	
Type of organization	• Federal health research agency
Business	• Health research – the creation and translation of new knowledge for improving the health of Canadians, strengthening the health care system, and contributing to the Canadian economy
Key component of	• National Health Agenda • Canada's Innovation Strategy
Mandate	• 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).
Core values and beliefs	• To assure Canadians that their investments in health research are wisely used, and that core values guide CIHR and influence all aspects of the organization and its relationships with others. These core values include: • public interest; • excellence; • ethics; • integrity; • freedom of inquiry; • transparency and accountability; • collaboration; • evidence; and • innovation.
Strategic outcome areas	• Outstanding Research – Advance health knowledge, through excellent and ethical research, across disciplines, sectors, and geography • Outstanding Researchers in Innovative Environments – Develop and sustain Canada's health researchers in vibrant, innovative and stable research environments • Transforming Research into Action – Catalyze health innovation in order to strengthen the health system and contribute to the growth of Canada's economy through discovery and innovation • These three strategic outcomes are enabled by: - Partnerships and Public Engagement; and - Organizational Excellence
Key activities	• Provides leadership on national health research issues • Leads development of national health research agenda • Launches health research initiatives in response to national priorities • Identifies and funds scientifically excellent research projects, programs, teams and collaborations in Canadian universities, hospitals and research institutions • Funds excellent health researchers and trainees • Supports knowledge translation programs designed to strengthen the health care system and contributes to a more prosperous Canadian society and economy

	• Provides leadership on ethical, legal and social public policy issues related to health and health research
How CIHR's activities benefit Canadians	CIHR's support for health research enables: • access to the world pool of new knowledge; • knowledge-intensive training, producing the highly-qualified personnel that are key to a strong knowledge-based economy; • increased productivity of the health system; • economic gains through support for commercialization activities to produce new products and processes that have been enabled by research discoveries, and through the business and employment they generate; • a major role for Canada in the global effort to protect against health threats, eradicate disease and promote good health; • a culture of innovation and evidence-based decision-making within the health care system; and • retention of the best health researchers, many of whom are also the country's educators of the next generation of caregivers.
Leadership	• Governing Council of up to 20 members • President of CIHR and Chair of CIHR's Governing Council, Dr. Alan Bernstein, O.C., FRSC
Reporting to Parliament	• Minister of Health

Structure and Resources	
Structure	• Thirteen 'virtual' Institutes that lead development of national health research priorities and agendas • A central office operating a wide portfolio of grants and awards in cooperation with the Institutes to enable a responsive national health research enterprise
Administered by	• A staff of 282 FTEs located in the National Capital Region and 62 staff in Institutes across Canada
Appropriations 2004-2005 (see Tables, below for a full picture of Resources)	• Total CIHR Authorities of $758.8M that includes: - Grants & Awards, $619.4 M; - Operating Budget, $46.8M (includes Employee Benefits Plan $4.8 M); - Networks of Centres of Excellence, $25M; and - Canada Research Chairs, $67.6M.
Partnering	• Extensive national and international collaborations with federal organizations, provinces, voluntary health organizations, universities, hospitals, community organizations, research centres, biotechnology, pharmaceutical and other health-related industries and organizations

CIHR: Total Financial Resources

Planned Spending	Total Authorities	Actual Spending
$790.6M	$758.8M	$748.0M

Total Human Resources for the department

Planned	Actual	Difference
347	282	65

Summary of Performance in Relationship to Departmental Strategic Outcomes, Priorities and Commitments

The following is a 'report card' that represents visually the progress against CIHR's commitments, including planned and actual financial resources spent in each Outcome area, as presented in CIHR's 2004-2005 *Report on Plans and Priorities* (RPP). Progress is indicated for each commitment within each Outcome area.

Strategic Outcomes	2004–2005 Priorities/ Commitments	Planned Spending	Actual Spending	Expected Results (Commitments made in the RPP)	Current Status
Strategic Outcome #1 Outstanding Research	**Priority #1** Advance health knowledge, through excellent and ethical research, across disciplines, sectors and geography.	$523.7M	$510.4 M	1. Fund excellent health research. 2. Advance national health research agenda 3. Respond to strategic health priorities 4. Enhance peer review 5. Help Canada innovate 6. Promote research on ethical, legal and socio-cultural issues 7. Foster discussion on ethics 8. Contribute to health policy debate	1. Successfully met 2. Successfully met 3.Successfully met 4. Successfully met 5. Successfully met 6. Successfully met 7. Successfully met 8. Successfully met

Strategic Outcome #2 Outstanding Researchers in Innovative Environment	**Priority #2** Develop and sustain Canada's health researchers in vibrant, innovative and stable research environments.	$172.3 M	$149 M	1. Increase the supply of researchers 2. Fund collaborative, interdisciplinary health research 3. Support investigator skills development 4. Utilize technology to enhance service delivery 5. Enhance interagency coordination and collaboration 6. Build research capacity in universities 7. Advance research relevant to OLMCs (Official Language Minority Communities)	1. Successfully met 2. Successfully met 3.Successfully met 4. Successfully met 5. Successfully met 6. Successfully met 7. Successfully met
Strategic Outcome #3 Transforming Health Research into Action	**Priority #3** Catalyze health innovation in order to strengthen the health system and contribute to the growth of Canada's economy.	$21.8 M	$18.8 M	1. Fund research on Knowledge Translation 2. Support Knowledge Translation networks 3. Advance a Commercialization Strategy 4. Enhance University-Industry relations	1. Successfully met 2.Successfully met 3. Successfully met 4. Successfully met

Summary of Performance in Relationship to Departmental Enabling Outcomes[1], Priorities and Commitments (CIHR's RPP 2004-2005)

Enabling Outcomes	2004–2005 Priorities/ Commitments	Planned Spending	Actual Spending	Expected Results Commitments made in the RPP	Current Status
Enabling Outcome #1 Effective Partnerships and Public Engagement	**Priority #4** Engage with the public through meaningful dialogue and establish effective partnerships with key stakeholders.	$27.8 M	$26.5 M.	1. Develop and support partnerships 2. Develop partnership guidelines 3. Enhance international collaboration 4. Promote Youth Programs	1. Successfully met 2. Successfully met 3. Successfully met; exceeded expectations in some areas 4. Successfully met
Enabling Outcome #2 Organizational Excellence	**Priority #5** Achieve our mandate through excellence in staff, service delivery, systems and management.	$45 M	$43.3 M	1. Advance modern management practices 2. Recognize excellence to build a committed and productive workforce 3. Enhance performance measurement 4. Identify the return on investment of health research 5. Ensure strategic positioning of CIHR	1. Successfully met 2. Successfully met 3. Successfully met 4. Successfully met 5. Successfully met; exceeded expectations in some areas

[1] These outcomes are considered "Enabling Outcomes" – they support the other three strategic outcome areas.

Overall Departmental Performance

Introduction

The 2004-2005 *Departmental Performance Report* (DPR) of the Canadian Institutes of Health Research (CIHR) demonstrates to Canadians its performance for the 2004-2005 fiscal year. CIHR is more than a funder of health research or a granting council. CIHR's 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."*

CIHR and its health research and translation mandate are an integral component of the Government of Canada's commitment to innovation, research and development. CIHR conducts problem-based and multidisciplinary research into the key health challenges facing Canadians. This approach brings together research on biomedical, clinical, health services and systems and the health of populations. CIHR provides a range of programs and activities that are designed to support outstanding research and facilitate knowledge translation, while maintaining a balance between investigator-initiated research and strategic research initiatives.

CIHR is called upon not only to create knowledge, but to ensure its translation into application. Research is a key part of the foundation of Canada's health care system. In the 21st century, health research and innovation will be central to Canada's future. Through new discoveries and treatments, research improves quality of life and builds a healthy economy. CIHR is positioning Canada internationally as a vibrant player in this exciting period of health research.

CIHR, and the way in which it is structured, is designed to enable world class, cutting edge health research conducted by the best and the brightest researchers. CIHR is organized around thirteen virtual Institutes that form a national research network linking researchers and stakeholders across the country, and internationally. Each Institute is led by a Scientific Director who is an internationally-recognized leader in the field. The Institutes are each dedicated to a specific area of focus, linking and supporting researchers pursuing common goals. They embrace a range of research from fundamental biomedical and clinical research, to research on health systems, health services, the health of populations, societal and cultural dimensions of health and environmental influences on health. This integrated approach brings together researchers, health professionals and policy-makers from voluntary health organizations, provincial government agencies, international research organizations and industry and consumer groups from across the country, under each Institute's virtual 'roof.'

CIHR invests in high quality people, excellent science, and training the next generation of health researchers – the backbone of the knowledge economy.

CIHR is guided by its five-year Strategic Plan, *Investing in Canada's Future: CIHR's Blueprint for Health Research and Innovation.* (http://www.cihr-irsc.gc.ca/e/8505.html) *Blueprint* http://www.tbs-sct.gc.ca/est-pre/20042005/CIHR-IRSC/CIHR-IRSCr45_e.asp was developed in consultation with critically-important stakeholders, including researchers, academics, health practitioners, elected representatives of government, departmental officials at all levels of government, industry, and the general public.

Strategic Context

This section of the Performance Report looks at some key developments in 2004-2005, and how they affect CIHR's performance environment.

An Evolving Canadian Health System

The Canadian health system continues to evolve as the federal, provincial and territorial governments work towards implementation of the 10-year plan for health care renewal, announced at the September 2004 First Ministers Meeting (FMM) on Health Care.

This plan committed $41.3 billion and recognized the critical importance of health research to provide the evidence base so necessary to informed decision making and effective action. For example, the Prime Minister's announcement stated, "Recognizing the progress that has been made, the federal government commits to continued investments to sustain activities in support of health innovation." The health care agreement provides major opportunities for CIHR to contribute to the achievement of the Government of Canada objectives.

Health Research Partners

A commitment to partnership activity is an integral component of CIHR's legislative, institutional, and performance evaluation frameworks. Partnership language is also embedded in the legislative authority, the CIHR Act (Bill C-13) where it states that CIHR's objective will be reached through: "exercising leadership within the Canadian research community and fostering collaboration with the provinces and with individuals and organizations in or outside Canada that have an interest in health or health research."

In recent years, there has been a clear movement towards increasing intergovernmental and inter-sectoral collaboration, both domestically and internationally. This trend is a recognition of the complexity of the health sector on a global scale and of the need to collaborate strategically in order to deal with health, safety and security issues. Collaborative approaches also seek to ensure national and international flexibility and responsiveness to changing environments and to emergency situations.

As a key member of the federal family of research organizations, CIHR works in collaboration with other federal agencies, for example, in the delivery of the Networks of Centres of Excellence program http://www.cihr-irsc.gc.ca/e/7290.html , the Canada Research Chairs www.nce.gc.ca , and Canada Graduate Scholarships, see http://www.cihr-irsc.gc.ca/e/24189.html and http://www.cihr-irsc.gc.ca/e/24190.html.

In a relatively short period of time, a number of new federal health organizations have been created. These include: National Science Advisor[2] (2004); Public Health Agency of Canada (2004); the Assisted Human Reproduction Agency of Canada (2004); Canadian Public Safety Institute (2003); and the Health Council of Canada (2003). New non-governmental and voluntary sector organizations and initiatives, including industry and international collaborative approaches, also offer opportunities for CIHR to continue to invoke the power of partnerships and provide leadership and coordination in setting direction on issues that are important to health research.

CIHR and its Institutes are working with the Public Health Agency of Canada (PHAC) in a number of key initiatives, including the development of six National Coordinating Centres (NCCs) designed to facilitate the translation of knowledge into action in key areas such as reducing health disparities among vulnerable populations, Aboriginal health, infectious disease, and infrastructure, info-structure and new tools development.

CIHR is also an active partner with Canadian and international organizations on the global health front. Addressing the health disparities that exist among countries of the developed and the developing world is very important to Canada. Global health challenges once considered external to Canada are increasingly linked to the health of Canadians. Canada's commitment to global health is a moral obligation and also a matter of economic opportunity and of national security.

The Canadian Institutes of Health Research, Canadian International Development Agency (CIDA), Health Canada, and International Development Research Centre (IDRC) have entered into a cooperation arrangement called the Global Health Research Initiative (GHRI) aimed at coordinating and building upon Canada's global health research activities.

CIHR has established various funding programs to facilitate partnership activities with international partners including:

- various CIHR Institutes that have been active in establishing collaborations with counterpart organizations in Japan (neuroscience, maternal child and youth health, aging), Germany and Italy (genomics), Mexico (tuberculosis, influenza), Australia and New Zealand (Aboriginal peoples' health), the US (mental health, heart/lung/blood), India (chronic and life-style diseases), and Latin America (gender and health);
- participation in seven international scientific exchange programs, which are intended to foster collaboration between independent investigators in Canada and those from Argentina, Brazil, China, France, Italy and Japan; and
- CIHR's President, Vice-President (Research) and thirteen Institute Scientific Directors, who continue to be active on many international committees and workshops. For example, the President represents Canada at biannual meetings of the Heads of International Research Organizations (HIRO), while the Scientific Director of CIHR 's Institute of Cancer Research represents Canada at the International Agency for Research on Cancer (IARC).

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[2] *Speech from the Throne to open the First Session of the Thirty-Eighth Parliament of Canada*, Ottawa, October 5, 2004

Information on these and other international relations may be found at http://www.tbs-sct.gc.ca/est-pre/20052006/CIHR-IRSC/CIHR-IRSCr5601_e.asp#1-6

The following is a partial list of CIHR's partners. Space limitations prevent us from listing all partners.

Federal Departments/Agencies	Provincial Departments/Agencies
Agriculture and Agri-Food Canada Canada Foundation for Innovation Canadian Blood Services Canadian Food Inspection Agency Canadian Health Services Research Foundation Canadian Institute for Health Information Canadian International Development Agency Citizenship and Immigration Canada Department of National Defence Environment Canada Epilepsy Canada Genome Canada Health Canada International Development Research Centre National Research Council National Secretariat on Homelessness Natural Sciences and Engineering Council Public Health Agency of Canada Social Sciences and Humanities Research Council Statistics Canada	Alberta Heritage Foundation for Medical Research Fonds de la Recherche en Santé du Québec Government of Saskatchewan (Innovation and Science Fund) Manitoba Health Medical Research Fund of New Brunswick Michael Smith Foundation for Health Research (BC) Ministère de la santé et des services sociaux du Québec Newfoundland and Labrador Centre for Applied Health Research Nova Scotia Health Research Foundation Ontario Innovation Trust Ontario Ministry of Health and Long-Term Care Ontario Research and Development Challenge Fund PEI, through the Regional Partnerships Program
Voluntary Organizations	**Industry**
ALS Society of Canada Alzheimer Society of Canada The Arthritis Society Canadian Allergy, Asthma & Immunology Foundation Canadian Association of Gastroenterology Canadian Association of Medical Oncologists Canadian Breast Cancer Research Alliance Canadian Cancer Society Canadian Chiropractic Research Foundation Canadian Diabetes Association Canadian Digestive Health Foundation Canadian Fanconi Anemia Research Fund Canadian Hypertension Society Canadian Institute for Relief of Pain and Disability Canadian Lung Association Canadian Medical Association CNIB E.A. Baker Foundation Epilepsy Canada Health Charities Council of Canada Fragile X Research Foundation of Canada Heart and Stroke Foundation of Canada Juvenile Diabetes Research Foundation The Kidney Foundation of Canada Muscular Dystrophy Canada NeuroScience Canada Ontario Neurotrauma Foundation	Canada's Research Based Pharmaceutical Companies (Rx&D) Small and Medium Enterprises (SME) and other Industrial organizations such as: • Venture Capital • Biotechnology companies • National Agri-food Organizations

	International
	National Health and Medical Research Council (Australia) Bill and Melinda Gates Foundation (US) Centre National de la Recherche Scientifique (France) CNPq (Brazil) CONICET (Argentina) Human Frontier Science Program (France) Indian Council of Medical Research Institut National de la Santé et de la Recherche Médicale (France) International Agency for Research on Cancer (France) Japan Society for the Promotion of Science Max Planck Institute (Germany) National Institute of Health of Mexico National Institutes of Health (US) National Natural Science Foundation of China The National Research Council (Italy) New Zealand Health Research Council Wellcome Trust (UK) Medical Research Council (UK) UNIFEM UNESCO Veterans Administration (US)

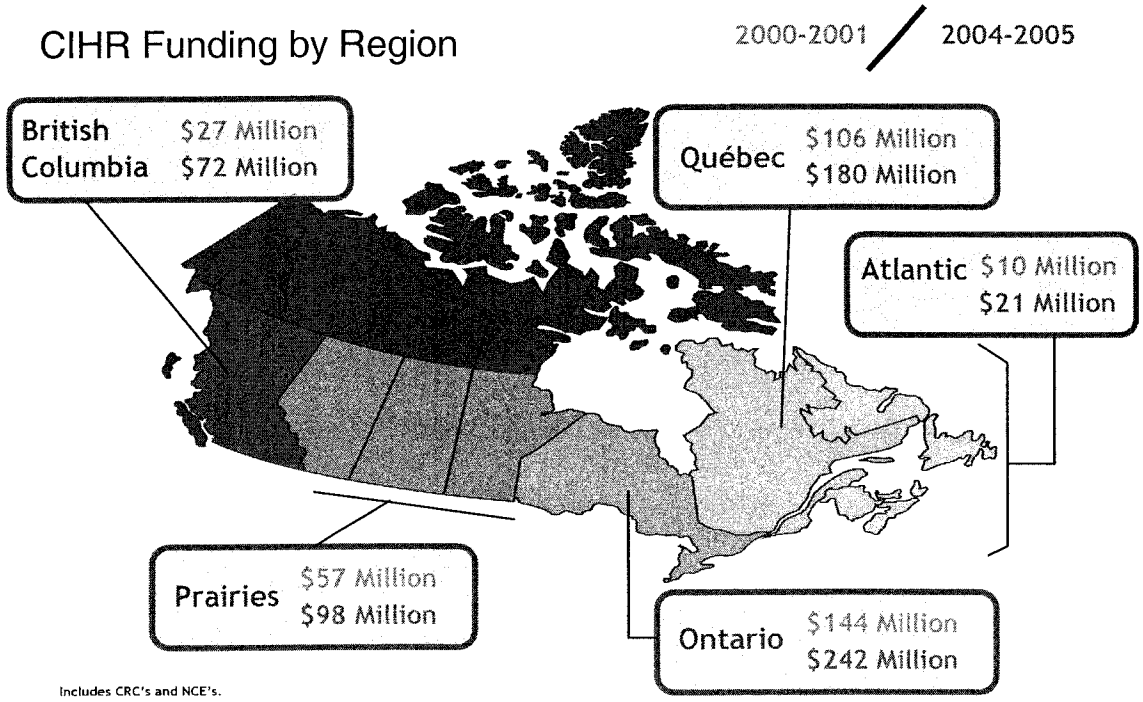
The Health Sector and the Canadian Economy

In 2004, CIHI reported a total health expenditure in Canada of more than $130 billion. This represents more than 10% of Canada's Gross Domestic Product (GDP). Further information is available at:
http://secure.cihi.ca/cihiweb/dispPage.jsp?cw_page=media_08dec2004_e.

Broadly speaking, the sector employs health service providers such as physicians, nurses, psychologists, technologists and technicians; health researchers, academics and educators; public sector workers in government departments, labs, and public and community health agencies; private sector workers in labs, research and development facilities, pharmacies, medical devices and equipment manufacturers, marketing and sales; voluntary sector workers involved in community based projects, research, national initiatives, and fundraising; hospital administrators; and maintenance workers. Results from the 2003 Statistics Canada Labour Force Survey indicate there are close to 1.1 million people in the health care labour force.

CIHR directly contributes to the overall Canadian economy:

- In 2004-2005, CIHR's combined salary support grants totaled $40 million and provided income to 736 world class health researchers working in areas of identified importance and concern to Canadians.
- Training programs totaled $42 million, contributing to the career development of 1,759 young researchers and scientists. This is a significant contribution to the forging of a highly skilled, highly trained scientific workforce, an integral component of Canada's future economic growth and competitiveness.
- CIHR's national mandate and structure helps to ensure that researchers and research are supported across the country. CIHR funds flow to researchers at 91 different institutions across Canada.



- CIHR has a dynamic commercialization strategy to catalyze innovation. The range of innovation research programs provided some $25 million in 2004-2005 to fuel the journey from the laboratory to the marketplace. CIHR's commercialization efforts recognize the organization's responsibility to ensure that Canadians derive economic value from publicly funded research.

CIHR and Canada's Performance 2004

CIHR programming contributes to a number of Government of Canada outcomes reported in *Canada's Performance 2004*, the federal government's reporting to Canadians on national performance. CIHR contributes to Canadian progress linked to sections called Innovation, A Healthy Population, and A Strong Health Care System. CIHR also contributes indirectly to several other Government of Canada performance outcomes. Direct CIHR contributions are presented below in bold italic text. The indicators listed below are those tracked by the Government in their report on *Canada's Performance 2004*.

Government of Canada Outcome	Government of Canada Indicator(s)	CIHR contributions
An Innovative and Knowledge-based Economy	*Innovation; Educational Attainment*	***- CIHR funds research that in turn contributes to innovation as measured by the Government of Canada through: gross expenditures on research and development as a percentage of Gross Domestic Product (GERD/GDP), and numbers of scientific patents and publications. - CIHR makes significant investments in the education of the next generation of researchers through salary support, undergraduate and graduate awards, training grants.***
Healthy Population	*Life Expectancy; Self-Rated Health Status; Infant Mortality; Healthy Lifestyles*	***- CIHR funds research in all these areas.***
A Strong Health Care System	*Waiting Times; Patient Satisfaction with health services*	***- CIHR funds research in all these areas.***

Canada's Environment is Protected and Restored from Pollution	*Air Quality; Water Quality*	*- CIHR supports a number of research initiatives related to water and air safety, environmental influences on health, inter alia.*
Income Security and Employment for Canadians	*Employment Rate*	*- Health research generates employment directly, for research technicians and staff of research-related facilities and services, and indirectly through the employment generated by spin-off companies (biotechnology, imaging and service) and the development of new product lines by existing companies. CIHR is funding research on the impact of employment on health (e.g., health disparities, mental health and the workplace).*
Strong Regional Economic Growth	*GDP per Capita*	*- CIHR's funding supports researchers and research institutes in all regions of the country, providing both economic and employment benefits.*

CIHR's Contribution to Government of Canada Priorities

The federal government has identified a number of cross-government, national priorities that require the active cooperation, collaboration and participation of different departments and agencies. CIHR is an important collaborator and contributor to a number of such cross-cutting or horizontal initiatives. Key examples relevant to CIHR's mandate include:

Public Health and Healthy Lifestyles

All thirteen Institutes support research on public and population health. The mandate of CIHR's Institute of Population and Public Health (IPPH) is to support research into the complex interactions (biological, social, cultural, environmental) which determine the health of individuals, communities, and global populations; and into the application of that knowledge to improve the health of both populations and individuals. A description of the IPPH and its areas of research may be viewed at http://www.cihr-irsc.gc.ca/e/12199.html. CIHR and its Institutes are working closely with PHAC's six National Collaborating Centres (NCCs), which were established in April 2004 with the goal of "strengthening Canada's public health system by facilitating information sharing and collaboration between federal, provincial and territorial governments, academic institutions, international experts, non-government organizations, researchers and health professionals." For information on the NCCs, see http://www.phac-aspc.gc.ca/media/nr-rp/2005/2005_15_e.html

The CIHR Institute of Nutrition, Metabolism and Diabetes (INMD) continued work with *Canada on the Move (COTM),* a unique web-based research project designed to help measure the barriers to and supports for increasing physical activity, including how Canadians use pedometers and the steps they take each day. All adult Canadians can participate by logging onto http://www.canadaonthemove.ca. Over its first year, COTM proved its ability to serve as a platform for research. Results from the first round of funded research projects will be published in the December 2005 issue of the *Canadian Journal of Public Health.* Furthermore, a recent collaboration with the Canadian Diabetes Association (CDA) and Dietitians of Canada (DC), funded by the Public Health Agency of Canada, highlighted COTM's capacity as a platform for partnership and potential as a source of evaluation information. In March 2005, INMD, CDA and DC drew a diverse audience together to discuss COTM's next steps. Approximately 60 health promotion/disease prevention practitioners, researchers, and policymakers participated and offered resounding support for expanding COTM. If additional resources are found, expansion of the platform would mean that COTM would continue to collect information from individuals about levels of physical activity and barriers to physical fitness for use by researchers and would add mechanisms of information exchange to allow groups participating in COTM to provide information about their programs and also receive back pertinent evaluation information. It would also supply groups with program enhancement tools to assist them in engaging with COTM. In the process, COTM's data collection tools would be established as a common system of metrics through which a variety of health promotion/disease prevention efforts could be assessed and even compared by researchers.

Biotechnology

The Canadian biotechnology sector is the second largest in the world. CIHR's programs are enhancing and preserving Canada's competitive position in this growth sector. The CIHR/Small & Medium Enterprises (SME) Research Program and the Proof of Principle Phase 2 programs enable biotechnology companies to partner with academic researchers in Canada. This partnership can help stimulate the development of start-up companies, university spin-offs, and SMEs.

Innovation Strategy

An ongoing federal priority is Canada's Innovation Strategy. A recent report by the Conference Board of Canada[3] benchmarked Canada's innovation performance against 10 other countries – Australia, Finland, France, Germany, Italy, Japan, Spain, Sweden, the United Kingdom and the United States – using 17 indicators of innovation. Among Canada's strengths identified in this report are a "predisposition to collaborate and share knowledge; a good skills foundation; a highly qualified workforce; and strong social values including a recognition of the need to balance social and economic goals." Opportunities include becoming "more efficient and effective in commercialization efforts by targeting new Canadian investments," providing "more balance in government resources and programs between R&D and commercialization," increasing "business investments in R&D, training and new machinery and equipment," and improving "understanding of innovation skills and integrate them into continuing education, training and immigration policies."

As illustrated throughout this DPR, CIHR is a key enabler of the innovation agenda. CIHR's mandate recognizes knowledge as a national strategic asset, and its programs are designed to invest in Canada's current and future intellectual and entrepreneurial capital.

For example, many projects that received Proof of Principle funding have succeeded in licensing the technology or forming a spin-off company. CIHR has received final reports from the first two years of the POP program (2001 and 2002) showing that eight new companies have been formed and thirteen new licenses have been issued as a result of the first two years of this initiative. The evaluation process for this program will be ongoing. An example of a successful technology funded by the POP program is Dr. Brian O'Dowd's drug screening assays. Dr. O'Dowd and his team from the University of Toronto have formed a spin-off company, Patobios Inc. to commercialize the technology. Other examples include:

- Dr. Neil Reiner's (University of British Columbia) discovery, a strategy for drug targeting that could lead to new, more effective antibiotics for hospital-acquired infections and many infectious diseases. The POP Phase I grant is enabling him to test this new strategy in intact, viable microbes with candidate drugs, to prove that this targeting works.
- Dr. Mandar Jog, of the London Health Sciences Centre in London, Ontario, with the help of Dr. Suwas Nikumb from the National Research Council, has developed a multi-channel device that can be implanted surgically to provide ongoing stimulation, and simultaneously and chronically record brain signals to ensure the stimulation is targeting the right area of the brain. A Proof of Principle Phase I grant helped him develop a prototype device. In the Phase II grant the prototype was tested in humans (fall 2004) and could spark the development of additional technology towards commercialization of the device.

[3] *Exploring Canada's Innovation Character: Benchmarking Against Global Best;* Conference Board of Canada; June 2004

Operating Environment

Governance

CIHR is a Departmental Corporation listed in Schedule II of the Financial Administration Act. As an arms-length agency of government, it is accountable to Parliament through the Minister of Health.

The agency is governed by a Council of up to twenty (20) members who have been appointed by Order in Council. The President chairs the Governing Council.

The Governing Council operates with advice from its Executive Committee, Nominating Committee, and Standing Committees on:

- Ethics;
- Finance and Planning;
- Evaluation, Performance Measurement and Audit;
- Grants and Awards Competitions; and
- Stem Cell Oversight.

Management

As senior officer of the organization, the President receives advice from thirteen Scientific Directors (the heads of the Institutes), a Director of Ethics, three Vice Presidents and an Executive Vice-President.

CIHR's Thirteen Institutes: An Innovative Structure, Fostering Excellence

The unique virtual Institute structure facilitates collaborative, cross-sectoral, multi-disciplinary research activities. The Institutes collectively and individually address domains of health research of immediate and identifiable concern to Canadians.

For example, the *Palliative and End of Life Care* initiative led by the Institute of Cancer Research (ICR) has changed the face of palliative care research in Canada and set an example for the rest of the world, placing Canada firmly in the forefront. The initiative involved sixteen partners including ICR and seven other CIHR Institutes, making it the largest cross-cutting initiative CIHR has mounted to date. In total, $16.5 million has been committed to this initiative. In addition, CIHR has now established a new peer review panel dedicated to grants in palliative and supportive care.

ICR is now working with the National Cancer Institute (NCI, US) and the National Cancer Research Institute (NCRI, UK) to organize an international workshop for about thirty researchers (ten from each country) that will take place in the UK in early October 2005. It is hoped that this workshop will lead to a three-way partnership between the US, UK and Canada. The details of the initiative are described in the report *A New Era in Canadian Palliative and End-of-Life Care Research*, available at http://www.cihr-irsc.gc.ca/e/27756.html.

Examples of Institute-funded research and activities are provided throughout this report to illustrate how health research is contributing to the priority concerns of Canadians.

The thirteen Institutes are:

- Institute of Aboriginal Peoples' Health
- Institute of Aging
- Institute of Cancer Research
- Institute of Circulatory and Respiratory Health
- Institute of Gender and Health
- Institute of Genetics
- Institute of Health Services and Policy Research
- Institute of Human Development, Child and Youth Health
- Institute of Infection and Immunity
- Institute of Musculoskeletal Health and Arthritis
- Institute of Neurosciences, Mental Health and Addiction
- Institute of Nutrition, Metabolism and Diabetes
- Institute of Population and Public Health

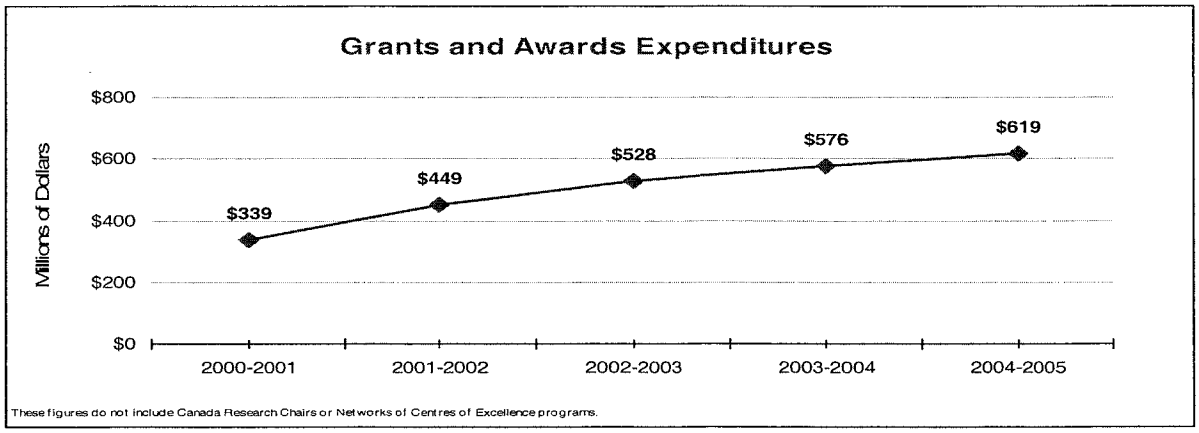
The Institutes are supported by an Ottawa office with broad corporate and operational responsibilities. Staff are organized into an Ethics Office and four portfolios that all report to the President: 1) *Corporate Affairs Portfolio* has responsibility for communications, governance, policy, planning, evaluation and audit; 2) *Research Portfolio* has the key responsibility for operations such as setting CIHR-wide research priorities and strategies, program design, processing applications for grant funding, organizing independent peer review of research applications and working with finance officers to administer approved grant funds; 3) *Knowledge Translation Portfolio* has responsibility for implementing knowledge translation strategies; and the entire organization is supported by 4) *Services and Operations Portfolio* through finance, administration, human resources and an information technology branch.

Human Resources: Contributing to Organizational Excellence

A core strength of a well-managed organization lies in the quality of its staff, and in the quality of human resources programs in place to ensure that the right people are in the right position, and recognized for their contribution to delivering the mission of the organization. Recent initiatives in the area of human resources are reported in *Enabling Outcome 2: Organizational Excellence.* In 2004-2005, CIHR employed 344 people to deliver its programming, i.e., 282 FTEs in Ottawa and 62 staff in Institute university-based offices across the country (through Institute Support Grants).

CIHR's Funding Approach

With annual grants and awards expenditures in 2004-2005 of $619.1 million, CIHR funds more than 9,400 health researchers in universities, teaching hospitals and other health organizations and research centres across the country. Since its creation in June 2000, the number of CIHR-funded researchers has climbed steadily from over 5,600 to over 9,400. CIHR's expenditures for grants and awards have virtually doubled from $339 million in 2000-2001, to just over $619 million in 2004-2005. In CIHR's largest program, the open Operating Grants program, annual operating grant sizes have risen from an annual average of $92,000 in 2000-2001 to an annual average of $108,500 in 2004-2005.



While grants and awards expenditures continue to rise, CIHR has kept its operating expenditures under 6% of total expenditures.

There are four main categories of CIHR funding:

1. Research Funding Programs (including Randomized Controlled Trials)
2. Research Personnel Programs: Training Awards and Salary Support Programs
3. Partnerships Programs
4. Strategic Funding Opportunities announced through Requests for Applications (RFA)

CIHR targets a significant portion (70%) of its grants and awards budget in "open" or investigator-initiated competitions for grants-in-aid of various types, training, and salary awards. "Open" means that there is no prescription of topic of enquiry, so long as it is relevant to health and is judged excellent by an arms-length peer review process. Through this form of funding, CIHR supports all areas of health research. CIHR targets 30% of its funding to support strategic research opportunities, which address CIHR and Government-wide health research priorities. Strategic research areas are identified by the Institutes, usually through consultations with key stakeholders. Strategic research responds to health challenges and scientific opportunities of high priority to Canadians. Strategic research initiatives often cross several Institute mandates and engage national and international partners.

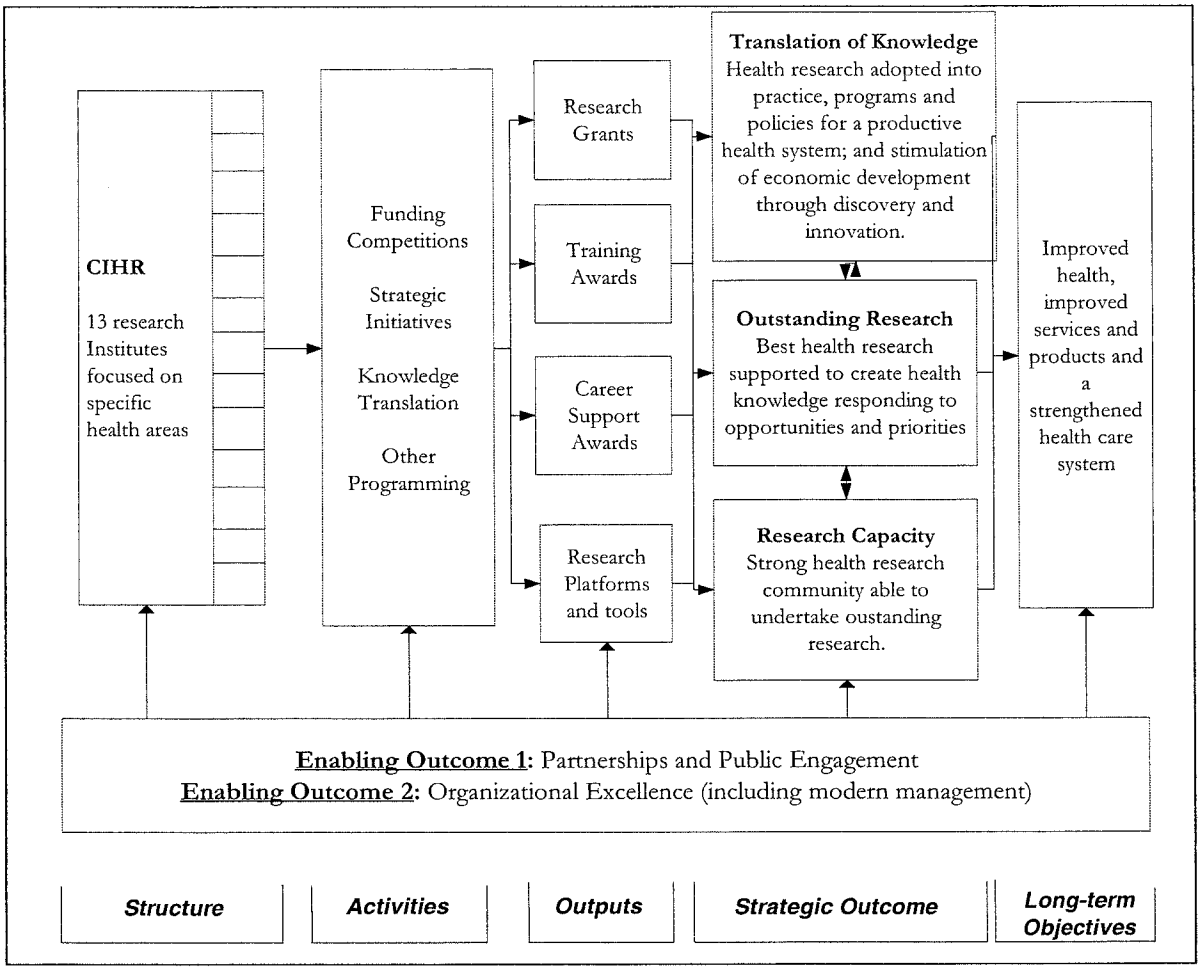
Peer Review Process: Ensuring Excellence

CIHR received over 7,800 funding applications in 2004-2005. A rigorous peer review system (see http://www.cihr-irsc.gc.ca/e/820.html for more information) ensures that only proposals that meet international standards of excellence are funded.

More than 2,300 expert reviewers participate in CIHR peer review committees and processes annually. These experts examine proposals with respect to significance in advancing knowledge and the health of Canadians, scientific approach and innovativeness. They examine the qualifications and track record of the researchers and the availability of the resources and expertise necessary for the proposed studies. The recommendations of the committees on the merits of applications are considered by CIHR's Governing Council which decides the number of applications to be funded within a previously approved budget allocation. For applications submitted in response to strategic initiatives of the Institutes, funding allocations are made by the Institute Scientific Directors, working with strategic budgets assigned to them by the Governing Council.

Working Towards CIHR's Long-Term Objectives

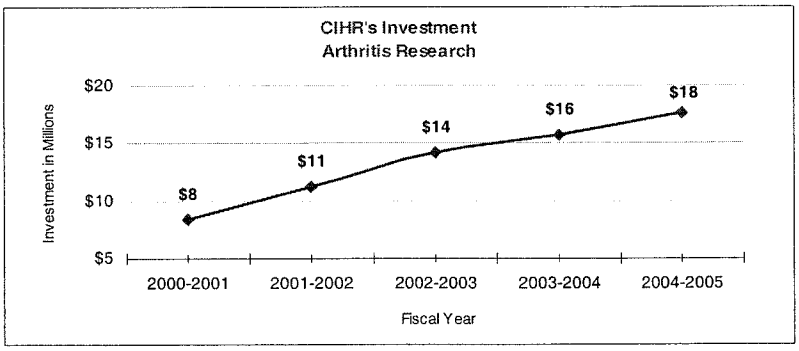
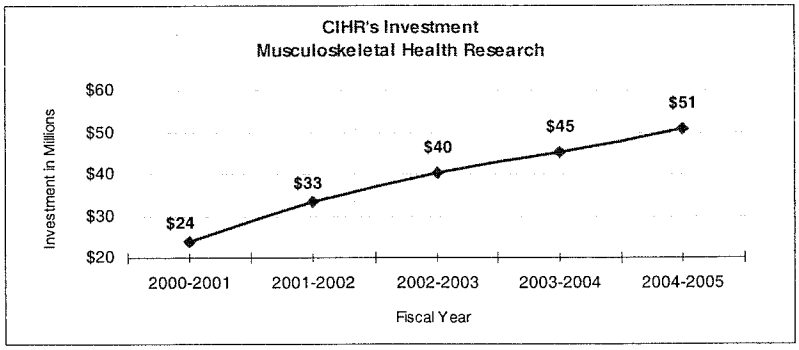
The following model illustrates the linkages between the structure, the activities, and the strategic outcomes of CIHR and how they contribute to the organization's overall long-term objectives: improved health, improved health services and products, and a strengthened health care system.



Why Health Research Matters to Canadians

In the following table, the left hand column presents information relating to key illness areas. This includes an estimate of the overall cost to the Canadian economy according to the most recent (1998) publication on the Economic Burden of Illness in Canada (EBIC), as well as information about the CIHR Institute most closely aligned with each illness area. The right hand column presents highlights of CIHR health research expenditures in each area over the last five years. The purpose of this table is to illustrate what CIHR is contributing in these key illness areas.

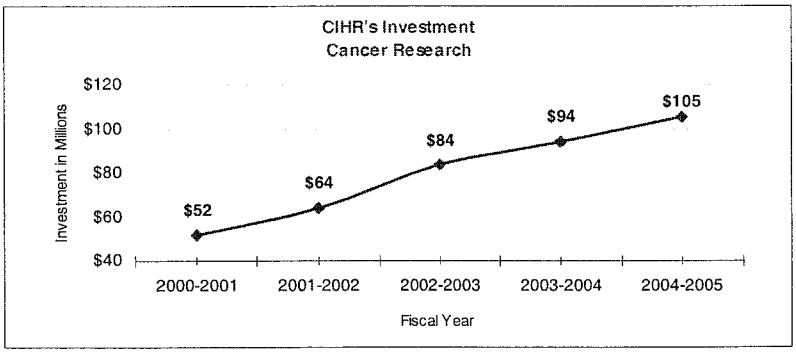
Examples of CIHR activities in relation to key health issues facing Canadians

	CIHR's investment in addressing the issue
Arthritis and musculoskeletal diseases • In 1998, musculoskeletal diseases (arthritis and osteoporosis) cost Canadians $16.4 billion, the second highest cost of disease after heart disease. Of this total, $2.6 billion is in direct costs, such as physician and hospital care and drugs, and $13.7 billion is in indirect costs, including premature disability and death. • **CIHR's Institute of Musculoskeletal Health and Arthritis (IMHA)**, under the leadership of Dr. Cyril Frank, supports research to enhance active living, mobility and movement and to address causes, prevention, screening, diagnosis, treatment, support systems and palliation for a wide range of conditions including arthritis, which is the largest subset of all musculoskeletal disorders. Its three research priorities are: physical activity, mobility and health; tissue injury, repair and replacement; and pain, disability and chronic diseases.	• Overall, in 2004-2005 CIHR invested approximately $18M in research on arthritis and an estimated $51M on research into musculoskeletal diseases across Canada.  

Cancer

- In 1998, cancer costs Canadians more than $14 billion. Of that total, $2.5 billion is for direct costs, such as hospitalization and medication, while $11.75 billion is for indirect costs, such as early death or disability.
- **CIHR's Institute of Cancer Research (ICR)**, under the leadership of Dr. Philip Branton, supports research to reduce the burden of cancer on individuals and families. Its goals are to help prevent and treat cancer while improving the health and quality of life of people with the disease. ICR, in consultation with its partners, has identified six major research priorities: palliative and end-of-life care, molecular profiling of tumours, early detection, functional and molecular imaging, risk behaviour and prevention, and clinical trials. Other priorities include capacity building and training in cancer research and the promotion of translational research on promising new therapies.

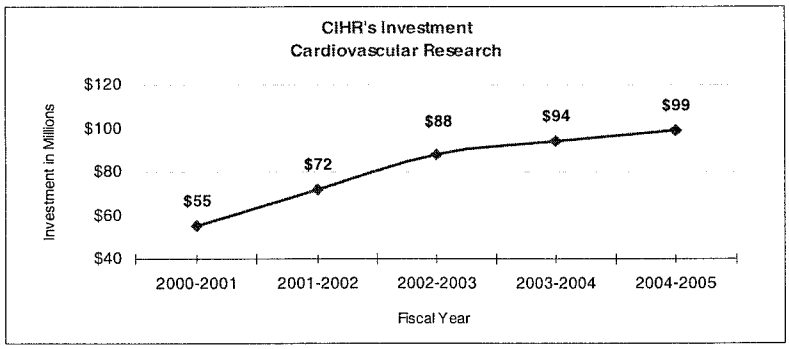
- Overall, CIHR is investing approximately $105M in cancer research across Canada.

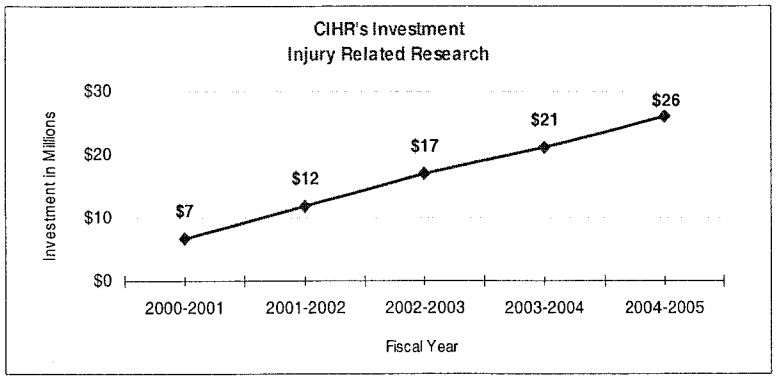


Cardiovascular Disease

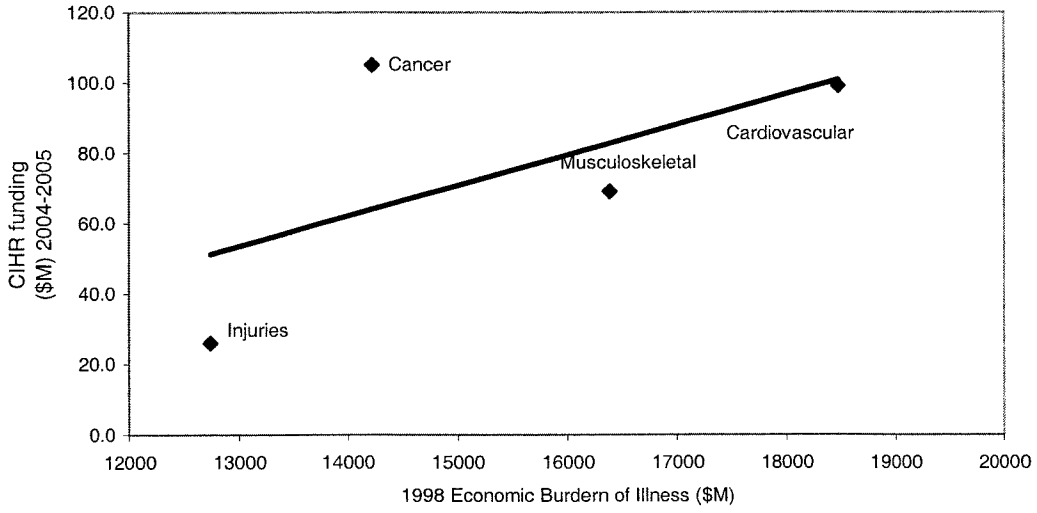
- Cardiovascular disease is the most costly disease affecting Canadians. In 1998, it was responsible for $18.5 billion in expenditures, 11.6% of the total cost of all illness in Canada. Of this, $6.8 billion was in direct costs, particularly for hospital care, and $11.7 billion was in indirect costs, most of it due to premature death.
- **CIHR's Institute of Circulatory and Respiratory Health (ICRH),** under the leadership of Dr. Bruce McManus, supports research into the cause, prevention, screening, diagnosis, treatment, support systems, and palliation for heart disease, as well as a wide range of other conditions associated with the lungs, brain, blood and blood vessels. The Institute's research priorities include: the influence of sex and gender on the risk of cardiovascular and lung disease, the interaction of genes and environment in determining susceptibility to circulatory and respiratory disease, chronic disease management, palliative and end-of-life care, regenerative medicine, tobacco in relation to heart and lung diseases, inflammation and thrombosis, cellular and molecular imaging, resuscitation for sudden death in the community, the use of

Overall, CIHR is investing an estimated $99M in cardiovascular research.



computational sciences and mathematics to improve our understanding of circulatory and respiratory diseases, and infectious causes of circulatory and respiratory disease.	
Injury • In 1998, injuries in Canada, both intentional and unintentional including suicide, cost more than $12.7 billion in direct and indirect costs, coming fourth after cardiovascular disease, musculoskeletal conditions, including arthritis, and cancer. • CIHR's efforts on injury research are being coordinated by Dr. Morris Barer, of the **Institute of Health Services and Policy Research** and Dr. Cy Frank**, of the Institute of Musculoskeletal Health and Arthritis.** In addition, other Institutes, such as the **Institute of Aging** have identified injury as a priority focus.	Overall, CIHR is investing approximately $26M in research on injury across Canada. 

The graph below presents the relationship between the burden of disease and CIHR funding, for each of the disease areas listed above:



Making a Difference for Canadians

The most recent *Health Care in Canada Survey* (November 2004)[4], an annual survey of health care providers, managers, and the Canadian public, shows that Canadians continue to be concerned about the state of the health care system, although 52% believe that the new federal-provincial-territorial health care accord will improve access to timely health care. Health care continues to rank as the most important issue facing Canada (40%). The survey also shows that people are very supportive of increased support for health research:

- 81% of Canadians support increased public funding of health research; and
- 70% of Canadians support providing incentives for increased public-private funding for health research.

Canadians understand and value the role of health research, and are proud of Canada's record of outstanding contributions to knowledge and health over the years. Health research:

- helps make the overall health system more effective and more efficient;
- improves individual and collective health status;
- contributes to the health of people all over the world; and
- ensures Canadians have access to the world pool of new knowledge and research.

But research has benefits in addition to improvements in health and the health system. Health research:

- enhances the standard of living and quality of life, and Canadian society;
- offers economic potential and employment through new companies and businesses created to produce new products and processes that have been enabled by research findings; and
- fosters a culture of innovation and evidence-based decision-making.

CIHR focuses on the health issues and research opportunities that matter most to Canadians. A prime example is the issue of wait times. The public, health care providers, and governments at all levels have identified wait times as an area of priority concern. As part of the new Health Accord, the federal, provincial and territorial governments, together with partners in the health care system, are taking steps to reduce wait times in key areas. At the end of February, 2005 CIHR's Institute of Health Services and Policy Research (IHSPR), in partnership with the Conference of Provincial/Territorial Deputy Ministers of Health and CIHR's Institutes of Cancer Research and Musculoskeletal Health and Arthritis, launched a "quick response" RFA (Request for Applications) to address this issue. The funded initiatives are intended to provide the Deputy Ministers with syntheses of evidence that could inform their work in meeting those commitments in the *Ten Year Plan to Strengthen Health Care* to establish evidence-based benchmarks for medically acceptable wait times. The initiatives will inform the work of the Deputy Ministers of Health in establishing benchmarks in five priority areas: cancer, heart, diagnostic imaging, joint replacement and sight restoration.

[4] Health Care in Canada Survey 2004; www.hcic-sssc.ca

CIHR also informed decisions of the Deputy Ministers of Health in other priority areas, for example, the health of vulnerable populations. The Reducing Health Disparities (RDH) initiative is a national initiative led by the CIHR Institute of Gender and Health (IGH), co-led by the Institute of Population and Public Health (IPPH), in collaboration with Health Canada, the Canadian Public Health Initiative, the Public Health Agency of Canada, the National Secretariat on Homelessness, the Social Sciences and Humanities Research Council of Canada, the Heart and Stroke Foundation of Canada, the Federal-Provincial-Territorial (F/P/T) Task Group on Health Disparities, Citizenship and Immigration Canada, and all the CIHR Institutes. Over the last three years, three Requests for Applications (RFAs) have been launched. The first two RFAs attracted close to 100 applications across the country and 24 interdisciplinary research teams were funded for one year. These interdisciplinary research teams are now conducting research with Aboriginal peoples, immigrants, refugees, the disabled, the poor, the homeless, people with stigmatizing conditions, the elderly, children and youth in disadvantaged circumstances, people with poor literacy skills, and women in precarious circumstances. These are Canada's vulnerable populations. They are more likely than others to become ill and less likely to receive appropriate health services. The third RFA, offering multi-year funding through Interdisciplinary Enhancement Grants (ICE), has also received an impressive response from the research community. A total of 73 Letters of Intent were submitted to this program and funding decisions will be available in March 2006. This initiative has also convened an International Think Tank, and in March 2004 co-sponsored a National Policy Forum on Health Disparities (with the Canadian Population Health Initiative of the CIHI, the Office of the Chief Scientist of Health Canada, and the F/P/T Task Group on Health Disparities of the F/P/T Advisory Committee on Population Health and Health Security). Recommendations from the National Policy Forum on Health Disparities guided discussions by Deputy Ministers of Health in 2005 and the six synthesis papers prepared for and discussed at these events have now been published as a special issue in the Canadian Journal of Public Health. Overall, one of the main goals of the RHD initiative is to inform programs and policies to improve access to health services and promote the health of vulnerable populations.

Future Challenges

Responding to increasing numbers of excellent research proposals

While the funding to CIHR has increased over the last number of years, so has Canadian capacity for health research. Other federal support for research, such as the Canada Foundation for Innovation and the Canada Research Chairs program, have successfully increased the number of highly-qualified health researchers with the infrastructure and time required for world-class research. CIHR has witnessed a corresponding growth in the number of highly-rated applications for funding we receive. The net result is that there is an increasing gap between the number of excellent proposals submitted to CIHR and the number that it is able to fund.

CIHR has made efforts to attract applicants from across the wide range of disciplines encompassed by its broad mandate, but if potential applicants perceive a very low probability of success in CIHR competitions, the chance of them participating in the future is likely to diminish.

A related challenge for CIHR is balancing the high demand for current-year budget commitments with the need to maintain a margin of flexibility in future-year budgets. Since most grants are for more than one year (usually three to five years), approvals in the current year also commit future-year funds, thus affecting the number of new projects that can be approved in the future.

Managing partner expectations

Partners, ranging from the federal government to voluntary health organizations, expect to find CIHR supportive of their aims, and ready to contribute a share of resources. CIHR must establish priorities among partnerships, balancing its support for forward-looking scientific opportunity with effective response to today's problems.

Focusing on fundamental programs and mechanisms

There is an understandable pressure on CIHR Institutes to attend to the many research priorities on their agendas. This results in numerous strategic initiatives and novel tools for the support of research. In the future CIHR must focus on identifying and using the best, most-effective tools and mechanisms rather than creating subprograms for every research priority.

These challenges are not unique to CIHR and we will continue to look not only towards internal analyses as we develop response options and strategies but also to our partners and similar organizations around the world.

A brief section on challenges and risks associated with each Strategic and Enabling Outcome area precedes each Outcome report.

Section II - Analysis by Strategic Outcome

Introduction

In this section of the Departmental Performance report 2004-2005, CIHR is pleased to report on performance in the three Strategic Outcome areas: *Outstanding Research*; *Outstanding Researchers in Innovative Environments*; and *Transforming Health Research into Action.* These Outcome reports are directly linked to the plans set out in CIHR's 2004-2005 *Report on Plans and Priorities* (RPP).

Performance is reported for each strategic outcome area as follows:

- First, with the help of a graphic (Logic Model), each outcome is positioned in the hierarchy of results that lead eventually to improved health and health care. The outcome area, including the desired results and how they will be achieved, is placed in context with the organizational goals of CIHR.
- Second, a summary of the key risks that are faced by CIHR in each outcome area is presented along with the strategies used on an ongoing basis to mitigate these risks.
- Third, key activities and achievements are reported for each Strategic Outcome, including performance against specific commitments made in the 2004-2005 RPP. Selected research initiatives are presented to illustrate performance and results in each Outcome area.

At this time CIHR is unable to provide information concerning resource commitments to specific *program activity areas* under each Strategic Outcome for 2004-2005. The organization is currently developing an enhanced resources reporting capacity within the *Management Resources and Results Structure* (MRRS) that will enable such reporting in the 2005-2006, and future DPRs.

With the goal of providing relevant information in a succinct fashion, only key programs and activities have been selected to illustrate performance against 2004-2005 plans and priorities. Where appropriate, URL links are included to on-line sources (CIHR, Institutes and external organizations) for more detail and information.

For detailed descriptions of what was planned within the Strategic Outcome areas consult CIHR's *2004-2005 Report on Plans and Priorities* at http://www.tbs-sct.gc.ca/est-pre/20042005/CIHR-IRSC/CIHR-IRSCr4501_e.asp.

Strategic Outcome #1 : Outstanding Research

- Overall resource allocations to this strategic outcome: planned spending: $523.7M; actual spending for 2004–2005: $510.4M

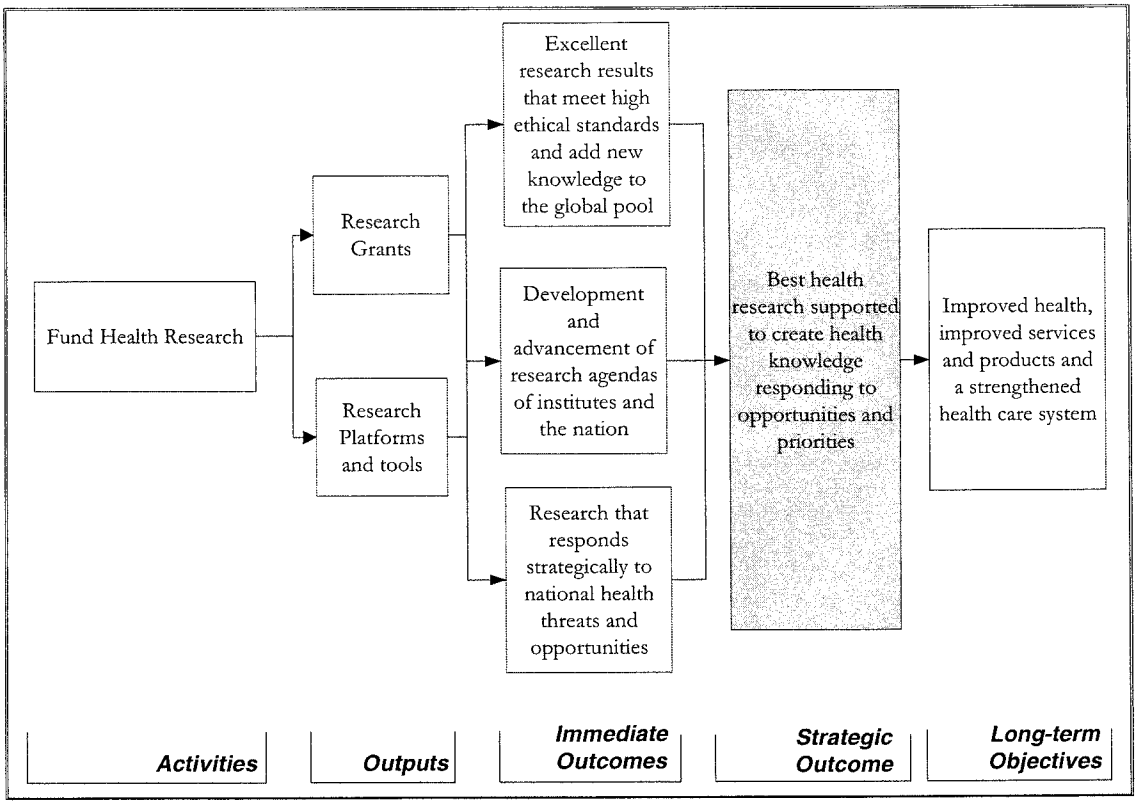
CIHR's first strategic outcome is 'outstanding health research.' To deliver its mandate, CIHR provides resources for the best possible Canadian research projects: research that is relevant to critical and strategic health priorities, ethical and humane, and offers potential for high impact, including commercial application. CIHR applies a rigorous peer review process involving highly qualified health researchers from Canada and other countries, who examine all proposals to identify the best research projects.

CIHR supports the development of new knowledge through health research across all disciplines that are relevant to health. In supporting outstanding research, CIHR contributes to the creation of world-class health knowledge that promotes the health of Canadians, and of people around the world.

'Outstanding Research' is directly connected to all the other outcome areas. Outstanding research needs to be shared and translated into practices, programs and policies, including potential commercial application (Strategic Outcome #3, Translating Health Research into Action). In today's world, where partnerships and collaboration are crucial to knowledge development and translation, Effective Partnerships and Public Engagement (Enabling Outcome #1) enable the conduct of outstanding research by ensuring that key stakeholders and the public are engaged in the research process. Finally, the ability of CIHR to perform effectively and ensure delivery of outstanding research is directly connected to Enabling Outcome #2, Organizational Excellence.

As shown in the logic model below, the achievement of this outcome will lead to the following results for Canadians:

- excellent research results that meet high ethical standards and add new knowledge to the global pool;
- development and advancement of research agendas of CIHR's Institutes and the nation; and
- research that responds strategically to national health threats and opportunities.



Risks and Challenges

In delivering results related to Strategic Outcome #1, Outstanding Research, the challenges to CIHR include:

- identifying the high-quality research that it will fund (the number of high quality proposals far exceeds the amount of available funding);
- encouraging applications from a broad spectrum of research areas of importance to Canadians; and
- enabling more projects while ensuring that each has enough funding to achieve results.

The risks of not adequately addressing these challenges are that CIHR might not fully provide the research base needed for improving health and health care in Canada. Further, CIHR risks not finding the right balance between number of projects funded and size of individual grants.

To face these challenges and mitigate these risks, CIHR:

- conducts a rigorous peer-reviewed, competitive process for screening applications for funding;
- actively uses its Institute Advisory Boards and a University delegate network to ensure that the entire health research community is aware of funding opportunities and competitions;
- regularly re-visits and balances the issue of grant and award numbers and size; and
- launches strategic research initiatives encompassing the broad spectrum of health research.

Strategic Outcome #1: Outstanding Research
Report on Activities 2004-2005

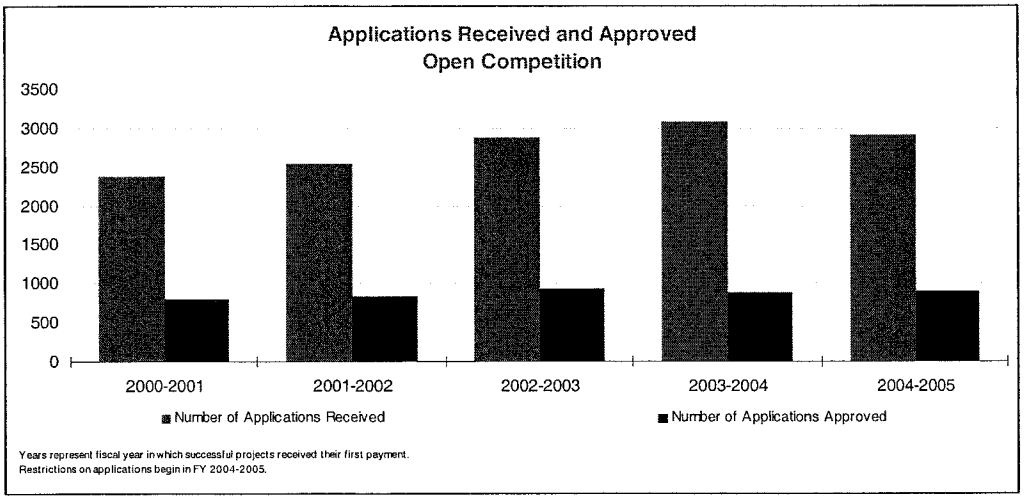
1: Fund Excellent Health Research: *Successfully Met*

What was planned:
"Over the next three years, CIHR will reinforce its commitment to research excellence through directing 70% of its base budget for grants and awards to the support of non-targeted, investigator-initiated research programs."

What was achieved:
In 2004-2005, CIHR invested approximately 72% of its base budget for grants and awards to support non-targeted, peer-reviewed investigator-initiated research projects through open competitions. As well 28% of the budget was invested in targeted, strategic health research initiatives. This is approaching CIHR's 30% objective for investments in strategic health research.

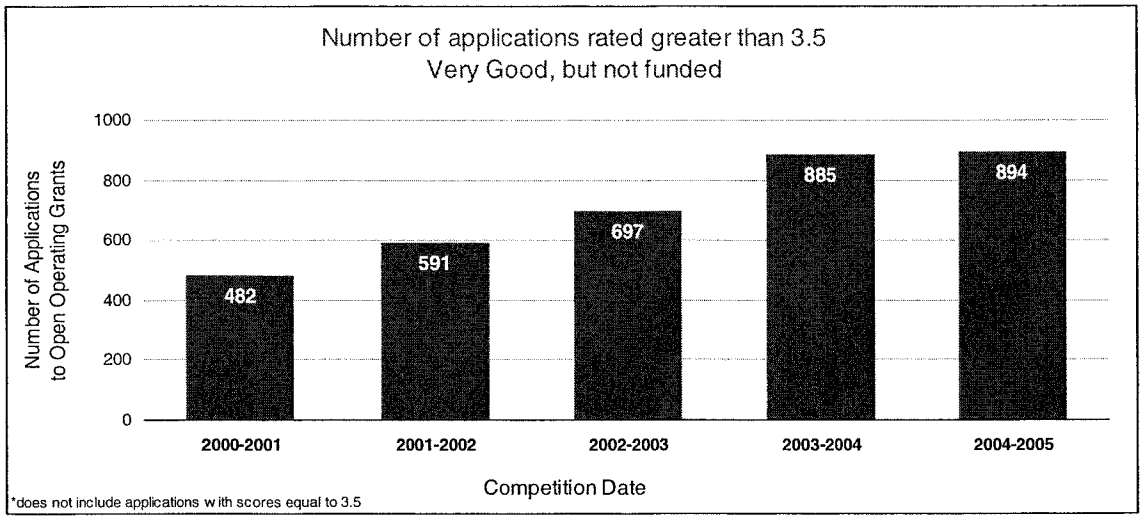
The total number of funded grants continued to increase in 2004-2005. CIHR awarded grants, totaling $537M, to the best research projects as judged by a comprehensive peer review system. This included a total of 5,440 funded projects in 2004-2005 (these amounts cover grants within outcome areas 1, 2 and 3, both open and strategic funding).

There continued to be strong demand for health research funding, particularly in CIHR's largest open competitions. The following graph displays the numbers of applications, both received and approved, for CIHR's largest open competition – The Operating Grants Program, for the last five fiscal years.



After four years of continuous increase in the number of applications, however, 2004-2005 saw a slight decrease in the number of applications received (largely due to new restrictions in submitting only one new application per investigator), while the number of applications funded increased slightly.

While the number of applications funded continues to increase, as the chart below shows there is still an increasing gap between the number of excellent proposals submitted to CIHR and the number that it is able to fund.



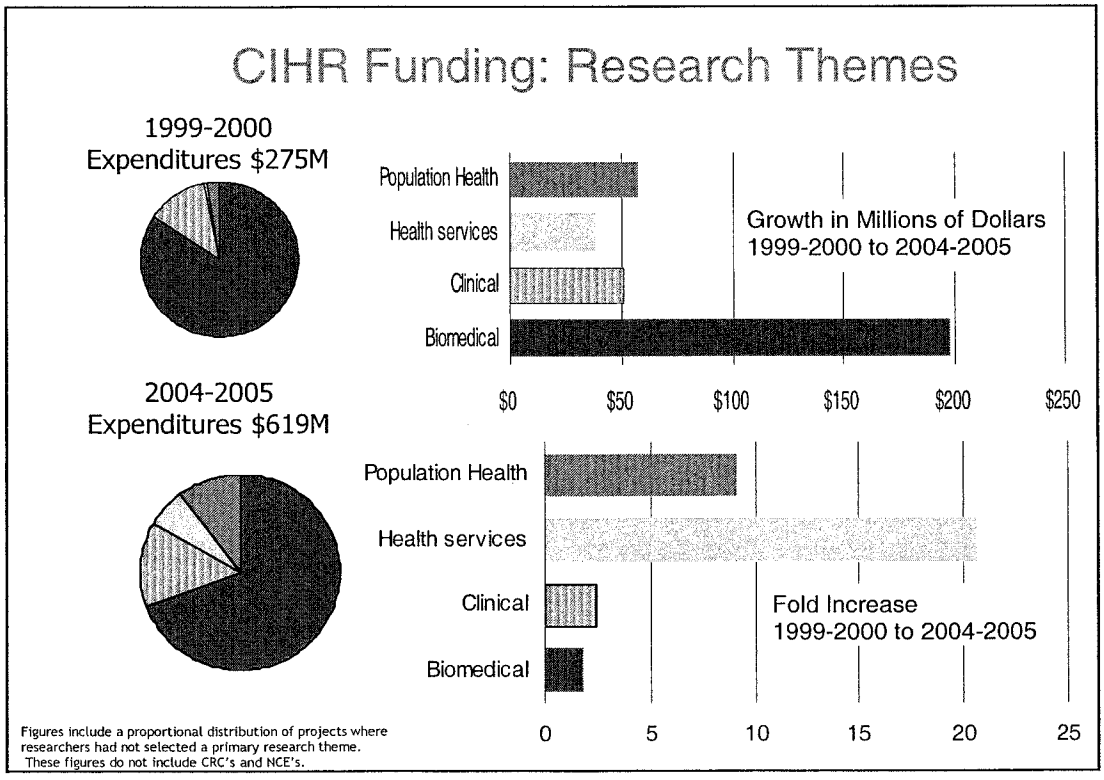
As noted, 28% of the CIHR grants and awards budget was invested in strategic health research to fund many excellent and innovative projects. An example of outstanding research is the $6 million project led by CIHR's Institute of Human Development, Child and Youth Health (IHDCYH) to study the cognitive and behavioural development of infants, children and youth. This initiative involves several other CIHR Institutes – the Institute of Gender and Health (IGH), the Institute of Neurosciences, Mental Health and Addiction (INMHA) and the Institute of Population and Public Health (IPPH) – as well as the National Alliance for Autism Research (NAAR). Within INMHA's major initiative on Regenerative Medicine and Nanomedicine, a team at the University of Montreal led by Dr Isabelle Brunette is using a truly innovative femtolaser strategy to improve cornea transplants. By the end of the 5-year team grant, it is expected that this novel approach would have proven to be highly effective in clinics, significantly cutting surgery time as well as risks of graft rejection by the host. Related to this same initiative, a team at the University of Laval under the direction of Dr Yves DeKoninck is using nanotechnology approaches that could enable the manipulation and measurement of dynamic molecular events in live conditions at previously unachieved levels of resolution. This team of physicists, chemists, computer scientists and neuroscientists intends to exploit advances in the fields of material sciences and nanotechnology to improve existing, and develop novel tools for the study of basic neuropharmacological mechanisms in the brain: cutting edge science, and novel technology.

As an illustration of research excellence in Canada, on November 24, 2004, CIHR hosted its second annual *Celebration of Excellence in Health Research* ceremony. The ceremony formally recognized Canada's best and brightest health researchers and lead supporters of health research for their outstanding contributions to improving the health of Canadians, the health care system and the knowledge-based economy. For profiles on the eight recipients of the 2004 awards see http://www.cihr-irsc.gc.ca/e/25561.html

2: Advancing the National Health Research Agenda: *Successfully Met*

What was planned:
"In 2004-2005, CIHR will continue to ensure appropriate collaboration on program and policy development with partners and stakeholders. For example, in 2004-2005 CIHR will absorb and begin to administer the Canadian Health Services Research Foundation's (CHSRF) open grants competition for applied health services and policy research projects. In addition, a number of the Institutes will revisit and update their strategic plans through consultations with their research communities and other stakeholders."

What was achieved:
As the chart below shows, CIHR continues to fund projects across the entire spectrum of research. While biomedical research continues to receive the most resources, there are consistent increases in all other research areas.



CIHR had 160 formal collaborative agreements in place during 2004-2005. For a description of CIHR's partnerships, see http://www.cihr-irsc.gc.ca/e/27359.html; also, see below, Strategic Outcome 2. Each Institute has developed a strategic plan that sets out the research priorities within its mandate. These plans map Canadian key research priorities across all areas. For Institute strategic plans, see http://www.cihr-irsc.gc.ca/e/9466.html . An excellent example of an Institute-led research priority is provided under Results, below.

Consultative networks were established and maintained to ensure that CIHR plans and priorities remain timely and relevant, for example, the President's International Advisory

Committee http://www.cihr-irsc.gc.ca/e/2858.html and the President's Voluntary Sector Committee http://www.cihr-irsc.gc.ca/e/20158.html.

A new CIHR funding initiative, Partnerships for Health System Improvement (PHSI, previously managed by the Canadian Health Services Research Foundation) aims to produce timely, high quality evidence with short-term positive results for the Canadian health care system within applied health services and policy research priority areas. Ten priority areas, such as management of the healthcare workplace, timely access to quality care for all, and governance and accountability were identified during national consultations in 2004, as well as in the area of nursing leadership, organization and policy. A Request for Applications (RFA) was issued for this initiative in November 2004; successful projects are expected to begin in early fall 2005, with a timeline of three years.

On November 1, 2004, the CIHR Institute of Infection and Immunity (III), in partnership with the CIHR Institute of Aboriginal Peoples' Health, announced the first round of Requests for Applications under the new HIV/AIDS Community-Based Research (CBR) program. The program supports applications that engage communities in health research on HIV/AIDS, empowering communities to take control of health promotion and practices to reduce the risk and incidence of HIV/AIDS infection in all settings. The program invites applications in two CBR streams: the Aboriginal stream and the General (non-Aboriginal) stream. Each stream will be made up of two components: research and capacity building.

The HIV/AIDS CBR program was established with the creation of the Canadian Strategy on HIV/AIDS (CSHA) in 1998. Initially administered by Health Canada, the CBR program was transferred to CIHR in April 2004. This program is intended to support the goals of the CSHA and to assist community-based groups, non-governmental organizations and institutions in developing the knowledge necessary to carry out their HIV/AIDS work in the most effective manner.

3: Responding to Strategic Health Priorities: *Successfully Met*

What was planned:
"CIHR's Institutes have collectively identified a number of major Multi-Institute Strategic Initiatives (e.g. tobacco, global health, regenerative medicine, reducing health disparities, health and environment, rural and northern health) to proactively address Canada's health research priorities. CIHR is committing 30% of its grants and awards base budget to these strategic research initiatives."

What was achieved:
In 2004-2005, CIHR directed approximately 28% of its base budget for grants and awards to support targeted, strategic research opportunities, very close to meeting the RPP commitment of 30% over the next three years.

Strategic research initiatives continued to provide support to researchers and research organizations in areas of strategic importance. In 2004-2005, funding of strategic programs totaled $171 million. In 2004-2005, CIHR and the Institutes initiated strategic research in areas ranging from wait times to health services for genetic diseases; from reducing health disparities and promoting the health of vulnerable populations to strategic training initiatives.

An example of a strategic activity is the Canadian Clinical Research Initiative (CCRI), CIHR's response to the clear need and opportunity to strengthen Canadian clinical research and to enhance its translation into practice and policy. Since 2001, CIHR has led a process of national consultation, needs identification, and partnership building. Plans have been formulated for training and sustaining the next generation of clinician-researchers and for creating nationally networked clinical research centres. CIHR has facilitated the creation of a national coalition, which will include the Canada Foundation for Innovation, health charities, provincial government health research agencies, universities and teaching hospitals, regulatory and ethical agencies, health professional organizations, and health industries. The coalition will build on the work undertaken to date by CIHR and aim to transform Canada's capacity for clinical research.

4: Enhancing the Effectiveness of CIHR's Peer Review System: *Successfully Met*

What was planned:
"With its broadened mandate, CIHR has faced a significant continual increase in the volume and breadth of grant applications, thus straining the peer review process. In 2004-2005, CIHR will continue its multi-year project to address this issue by implementing ways to improve the effectiveness and efficiency of these processes, in particular through the use of electronic submission and processing throughout the peer review process."

What was achieved:
As planned, the peer review system started to implement electronic processes in response to research priorities and application pressures. Public and stakeholder engagement in health research was enhanced by a pilot project to include members of the public as community reviewers on peer review committees. The accountability and transparency of the peer review process was enhanced by the pilot 'community reviewers' project. Additional peer review committees were established in the areas of Aboriginal peoples' health, and palliative care. These groundbreaking new peer review committees are evidence of CIHR's multi-disciplinary, issue-based approach to health research being put into practice in the manner in which health research funding applications are reviewed.

Implementation of ResearchNet, an initiative to leverage technology to improve the effectiveness and efficiency of the peer review system, continued in 2004-2005 with a pilot project to allow for the collection and distribution of reviews, peer review information, and recommendations from external committee reviewers. Further information on ResearchNet is provided below, under Strategic Outcome 2. A pilot project for online application to five grants committees was initiated in 2004-2005.

Fifteen grants and four awards committees participated in the ResearchNet pilot project. Ninety-six percent of Peer Reviewers found that ResearchNet made the peer review process more efficient.

5: Helping Canada Innovate: *Successfully Met*

What was planned:
"CIHR will continue to administer $25 M annually in the Networks of Centres of Excellence Program, in collaboration with Industry Canada and the federal granting councils, Natural Sciences and Engineering Research Council of Canada (NSERC) and Social Sciences and Humanities Research Council of Canada (SSHRC)."

What was achieved:
In addition to its suite of commercialization programs described later in this report, CIHR invested $25 M in the Networks of Centres of Excellence (NCEs) program. The Networks of Centres of Excellence (NCE) program is a federal program administered jointly by the Natural Sciences and Engineering Research Council (NSERC), the Canadian Institutes of Health Research (CIHR), and the Social Sciences and Humanities Research Council (SSHRC) in partnership with Industry Canada. In addition to this direct investment, CIHR continued to collaborate with individual NCEs to ensure that NCE priorities are aligned with the priorities identified through CIHR Institute consultations. For further information on the NCE programs and initiatives, see http://www.cihr-irsc.gc.ca/e/7290.html.

The NCEs collectively work to mobilize Canada's research talent in the academic, private and public sectors and apply it to the task of developing the economy and improving the quality of life of Canadians. This goal is consistent with, and reinforces, the three pillars of the federal Science and Technology strategy: sustainable job creation and economic growth, improved quality of life, and advancement of knowledge. The following table presents CIHR's contribution to 10 Networks in 2000-2001 and 11 networks in 2004-2005.

Research Project Title	Research Institution	Fiscal Year 2000-2001	Fiscal Year 2004-2005
Canadian Arthritis Network (CAN)	Mount Sinai Hospital (Toronto)	$2,902,500	$2,347,500
Mathematics of Information Technology and Complex Systems (MITACS)	Simon Fraser University (Burnaby, B.C.)	$960,000	$814,750
Protein Engineering Network of Centres of Excellence (PENCE).	University of Alberta	$2,250,000	$2,103,500
Canadian Genetic Diseases Network	University of British Columbia	$4,500,000	$4,052,000
Canadian Bacterial Diseases Network	University of Calgary	$1,900,000	$1,711,500
Health evidence application and linkage network (HealNET)	University of Toronto	$1,800,000	$0
Canadian Stroke Network (CSN)	University of Ottawa/ Université d'Ottawa	$3,525,000	$3,525,000
Canadian Network for Vaccines and Immunotherapeutics of Cancer and Chronic Viral Diseases (CANVAC)	Université de Montréal	$3,525,000	$3,525,000
Stem Cell Genomics and Therapeutics Network (StemNET)	University of Ottawa/Université d'Ottawa	$2,708,250	$3,588,000
The Canadian Language and Literacy Research Network (CLLRNet)	University of Western Ontario	$364,200	$482,400
Canadian Advanced Food and Bio-materials Network (CAFBN)	University of Guelph		$1,320,000
The integrated natural/medical/social study of the changing Canadian Arctic (ArcticNet Network)	Université Laval		$1,530,350
AllerGen (allergy genes and environment network)	McMaster University	CIHR has not contributed to this network in 04-05, but will contribute in future fiscal years	
	Total CIHR Contribution:	**$24,434,950**	**$25,000,000**

Another example is "Addressing Health Care and Health Policy Challenges of New Genetics Opportunities", see http://www.cihr-irsc.gc.ca/e/25846.html . CIHR's Institute of Genetics, Institute of Health Services and Policy Research, Institute of Population and Public Health, the Canadian Coordinating Office for Health Technology Assessment and Heart and Stroke Foundation of Canada have partnered to fund this initiative. This initiative is designed to provide operating grant funds in support of research projects, the results of which will better equip health care providers, administrators and policy makers to improve the health of populations and strengthen the health care system in Canada in the face of the rapid growth in new technologies and understandings associated with the 'genomics era'.

6: Promoting Research on Ethical, Legal and Socio-Cultural Issues Related to Health: *Successfully Met*

What was planned:
"A special research fund of $1M is now set aside on a regular, annual basis to serve as a minimum base amount to support strategic initiatives on cross-cutting ethical, legal and socio-cultural issues as an integral part of the national health research agenda. Particular attention will continue to be paid to helping build research capacity in ethics, law and the humanities."

What was achieved:
CIHR launched 2 RFAs (Requests for Application) in January 2005: an RFA on Ethical, Legal and Social (ELS) Issues in Health Research – Research Networks Grants; and an RFA on the Integrity of Clinical Research in Canada. In 2004-2005 funding was also made available for Operating Grants or for fellowships in themes related to ELS such as personal information in health research, research in ethics and empirical and conceptual research on ethical, legal and social issues in studies involving pregnant women and children. For information on funding opportunities including RFAs and priority funding announcements, see http://www.cihr-irsc.gc.ca/e/26626.html

The *Douglas Kinsella Award for Research in Bioethics* was established in 2004-2005. CIHR's Ethics Office and the CIHR Institute of Musculoskeletal Health and Arthritis have taken the lead in honoring Dr. Kinsella's accomplishments in bioethics and his lifelong promotion of the ethical treatment of patients and research participants, by establishing a Doctoral Research Award in his name. This award will be offered annually to an outstanding individual whose research focuses on ethical issues related to health and/or health research.

7: Fostering Discussion of Ethical Issues and the Application of Ethical Principles in Health Research: *Successfully Met*

What was planned:
"CIHR is committed to promoting health research that meets the highest international standards of excellence and ethics. CIHR works collaboratively with many partners to develop the highest ethical standards for health research and see to their application in practice. CIHR, NSERC and SSHRC together created an Interagency Advisory Panel and Secretariat on Research Ethics in 2001 to advise on the further development, interpretation, implementation and education of the Tri-Council Policy Statement: Ethical Conduct for Research Involving Humans. The objectives of this five-year, $5.5 million initiative, with results to be reported in 2006, are to promote high ethical standards in Canadian research involving humans aimed at protecting human research participants and enhancing public trust and accountability in research ethics."

What was achieved:
Support for the National Council on Ethics in Human Research (NCEHR) continued in 2004-2005. Throughout the year, NCEHR successfully completed six institutional visits and delivered two sessions for the review of biomedical or social science research. In addition to providing core funding to NCEHR and leading the task force on Accreditation, CIHR co-hosted, with Health Canada, the Office for Human Research Protections, the Interagency Advisory Panel on Research Ethics, and The Royal College of Physicians and Surgeons, the NCEHR Annual Conference which drew 250 participants in March 2005. For more information on NCEHR please visit their website at http://www.ncehr-cnerh.org/english/home.php

The Final Report of the National Placebo Working Committee (NPWC) was submitted to CIHR and Health Canada on July 30, 2004. Electronic and hard copies of the Final Report in both official languages were made available to the public in October 2004. The report can be found at http://www.cihr-irsc.gc.ca/e/25139.html

A procedure was developed for addressing allegations of non-compliance with research policies, including establishment of a new Research Integrity Committee at CIHR. Twelve new allegations of non-compliance were addressed in 2004-2005.

8: Contributing to Broader Health Policy (Ethics) Debate: *Successfully Met*

What was planned:
"In 2004-2005, CIHR will continue to build on the work done to date: the development and implementation of a national law and guidelines for regulating stem cell research; the development and harmonization of federal/provincial/territorial laws and policies governing privacy and confidentiality of personal information in health research; the harmonization of a national policy respecting the appropriate use of placebos in randomized controlled trials; and the need to develop national ethics guidelines for research involving Aboriginal peoples."

What was achieved:
The Aboriginal Ethics Working Group (AEWG) has met over the course of the last year for in-depth analysis and deliberation of Aboriginal and research issues. The development of aboriginal-specific health research guidelines to ensure an inclusive process involving Aboriginal people took place over the course of the year. A draft will be completed in May 2005 followed by the vetting of the guidelines with Aboriginal, research and institution communities by the Aboriginal Capacity and Developmental Research Environments (ACADREs).

The first guidelines are now available for regional and national consultation of Aboriginal people.

Public and target consultations on draft best practices for protection of privacy in health research were held in 2004, including on-line feedback, written submissions, stakeholder workshops and small group dialogues with citizens.

An *Institutional Conflict of Interest* (ICOI) invitational meeting was held in October 2004. The objective of the meeting was three-fold: a) identify and clarify key ethical issues regarding potential conflicts of interest in the sponsorship of health research and the dissemination of research results including development, commercialization and publication; b) identify concrete strategies, including immediate steps, for managing some types of institutional conflicts of interest; and c) identify areas in which more research is needed to fully understand and respond to the ethical complexities involved. The meeting led to concrete strategies for managing some types of ICOI; identification of potential research questions to be funded by CIHR; and an action plan for CIHR to formally address COI issues (to be posted on CIHR website in 2005).

In December 2004, the Stem Cell Oversight Committee (SCOC) provided input on the proposed approach for regulations concerning Section 8 (consent) and the Section 3, definition of an *in vitro* embryo donor under the *Assisted Human Reproduction Act.*

A summary report on all feedback received during the best practices for protection of privacy in health research consultation and an evaluation of the consultation process will be released in the summer, 2005.

The Stem Cell Oversight Committee (SCOC) continued their work to clarify the *Guidelines for Human Pluripotent Stem Cell Research* and update the content, with modified guidelines published in June 2005.

Strategic Outcome #2: Outstanding Researchers in Innovative Environments

- Overall resource allocations to this strategic outcome: planned spending: $172.3 M; actual spending for 2004–2005 $149M.

CIHR is committed to strengthening Canada's health research communities by continuing to broaden, deepen and sustain health research excellence. CIHR will continue to increase its support for multi-disciplinary and multi-sectoral teams of researchers. CIHR will ensure that it supports the right balance and mix of health researchers to realize its mandate and strategic objectives.

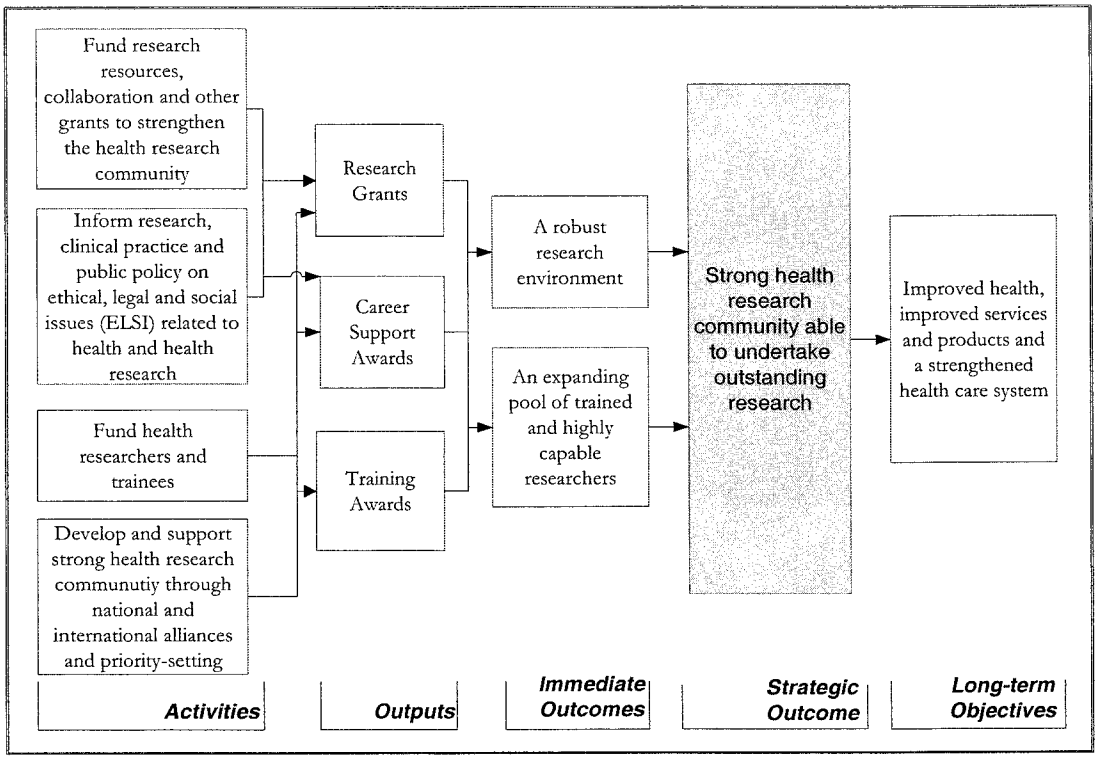
CIHR recognizes the importance of new investigators to the Canadian health research enterprise. In order to produce outstanding, world-class health research, Canada requires outstanding researchers. New researchers must be attracted to the field, they must be supported, and they must have opportunities for training and development. Moreover, it is important that Canada offer a world-class research environment in terms of infrastructure, support for students, and research funding, in order to retain the best researchers in Canada, and to recruit excellent researchers from other countries.

The creation of a strong research community that is able to undertake outstanding research is one of the core strategies CIHR engages in pursuit of the longer term commitment to improve health care and the health system.

Development and retention of a national cadre of outstanding researchers and of a world-class research environment is directly connected to Strategic Outcome #1 (Outstanding Research). It is also connected to Enabling Outcome #1, Effective Partnerships and Public Engagement, including activities to introduce young Canadians to and encourage their pursuit of scientific and research activities.

As shown in the logic model below, the achievement of this outcome will lead to the following results for Canadians:

- an expanding pool of trained and highly capable researchers; and
- a robust research environment.



Risks and Challenges

In terms of developing research capacity, CIHR and its partners face a number of challenges:

- the country faces potential shortages in scientific, research and academic personnel, including medical professionals, due to an ageing workforce, as well as international competition for highly qualified people; and
- there is a need for sustained research funding to continue to support an expanding pool of researchers, stimulated by other federal investments in research, particularly CFI and the Canada Research Chairs.

The risks of not adequately addressing these challenges are that CIHR and Canada might not have the intellectual capital to conduct the research needed to support improvements to health care and the health system in Canada. Failure to address the capacity issue also places Canadian economic competitiveness at risk.

In order to help face these challenges and mitigate these risks, CIHR has made research capacity development a priority and has launched strategic programs to address capacity gaps.

Strategic Outcome #2: Outstanding Researchers in Innovative Environments
Report on Activities 2004-2005

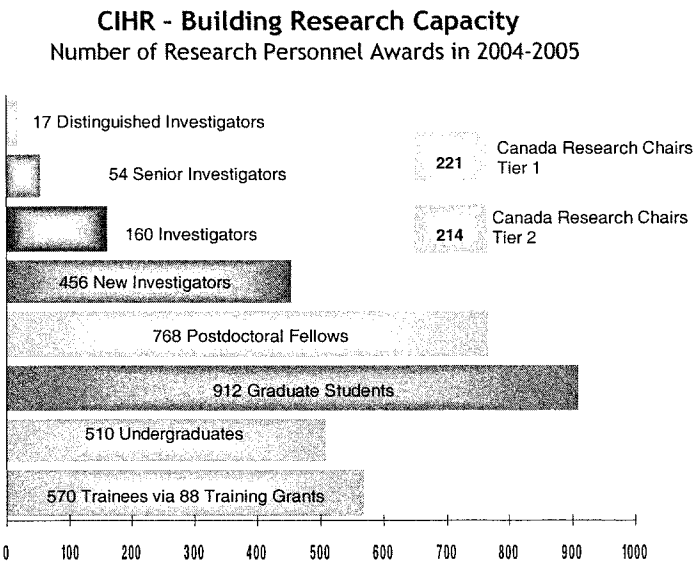
1: Increasing the Supply of Researchers: *Successfully Met*

What was planned:
"In order to address Canada's increased requirement for scientific and technical personnel, and health professionals, CIHR will continue to support programs such as the Strategic Training Initiative in Health Research (STIHR), which it launched in 2001. Funding for an additional four programs is expected to begin in 2004."

What was achieved:
One way for Canada to compete in the fierce international struggle to attract new, bright, creative research talent is to ensure innovation and excellence in the next generation of Canadian health research training programs. To work towards achieving this objective, in 2001 CIHR created a new funding mechanism, the Strategic Training Initiative in Health Research (STIHR), through which it provides Strategic Training Program (STP) grants. STIHR funding is provided by CIHR and its partners in government, voluntary and private sectors. The 88 currently funded programs are supporting an estimated 570 trainees. Further to peer review of applications received, an additional two programs were rated high enough to receive funding beginning in 2004. For information about the STIHR, including partners in the government, private and voluntary sectors, see http://www.cihr-irsc.gc.ca/e/22174.html.

An excellent example of a CIHR Strategic Training Program is the Canadian Child Health Clinician Scientist Program (CCHCSP) http://www.cchcsp.ca/, which is funded by CIHR in partnership with Sick Kids Foundation and the BC Research Institute for Children's & Women's Health/BC Children's Hospital Foundation. The CCHCSP is a transdisciplinary training program for the next generation of clinician-scientists in child and youth health research in Canada. The CCHCSP is the first national network of thirteen Canadian Child and Youth Health Research Centres dedicated to training the next generation of clinician-scientists to have the specialized knowledge and skills required to undertake health research with and about children.

In addition to STIHR, CIHR manages a variety of programs aimed at strengthening the supply of health researchers. The graphic below displays the number of people in health research throughout Canada who were supported through various CIHR awards programs in 2004-2005.



CIHR Institutes have introduced many innovative initiatives to build capacity within their research areas. For example, in collaboration with the National Institutes of Health (NIH) and the National Institute of Child Health and Human Development, CIHR's Institute of Human Development, Child and Youth Health announced two summer institutes for 2005: one in reproductive and perinatal epidemiology and one in maternal-fetal pharmacology. The response from the community was very strong, with over 100 applications received from Canada, the United States and abroad. Twenty participants will be selected for each summer institute.

The Institute of Genetics (IG) originated the 'New Principal Investigator (PI)' meeting, since used by other CIHR Institutes. This annual 'New PI' meeting is for new faculty members (in their first four years) at Canadian universities, including new scientists and clinician scientists in the genetics and biochemistry, developmental biology, bioinformatics and cell biology communities. Without exception, the approximately 100 new Principal Investigators (PIs) who attended the 2002, 2003 and 2004 meetings declared the events to be a remarkably valuable experience. The overall goal of these meetings is to facilitate the career development of these 'newly hatched' health researchers. The meeting fosters the formation of peer networks between the New PIs working in related or overlapping areas of research. In addition, a significant portion of the meeting is devoted to mentoring, both through formal presentations by 'star' senior scientists followed by discussion, as well as many informal interactions. New PIs are counseled on grant & paper writing, on running a lab, managing budgets, and interacting with lab personnel.

2: Fund Collaborative, Inter-disciplinary Health Research: *Successfully Met*

What was planned:
"CIHR's Institutes will continue to utilize program tools over the next three years that encourage collaborative, transdisciplinary, problem-based research. Through evaluations planned in 2004-2005 on the Interdisciplinary Health Research Teams (IHRT), and Community Alliances for Health Research (CAHR) programs, CIHR will consolidate and simplify its numerous program tools to become more efficient in program delivery and make it easier for researchers to access the support they need."

What was achieved:
Building on pilot projects launched by CIHR's Institutes, and the results of evaluations of program vehicles for support of team-based research, in 2004-2005 CIHR designed and launched the Team Grant program. The design phase for an Emerging Team Grant program is nearing completion; this program will support the development of teams in priority research areas.

Under an existing program, New Emerging Teams (NETs), two new emerging teams were funded in 2004-2005 to address the critical issue of suicide in Aboriginal populations. These teams are being funded by the Institute of Neurosciences, Mental Health and Addictions in partnership with the Institute of Aboriginal Peoples' Health and Health Canada. One team, led by Dr. Gustavo Tureki at Douglas Hospital-McGill University, is developing a community project on suicide prevention in Nunavut. The second team, led by Neil Andersson, based in Ottawa, set up the Aboriginal Youth Resilience Network (ACYRN), a framework for supporting Aboriginal community-led suicide prevention by academic technical resources including epidemiology, family medicine, traditional medicine, social science, social welfare, psychology and other health scientists, all with experience in the Aboriginal context.

3: Supporting Investigators to Build the Necessary Skills: *Successfully Met*

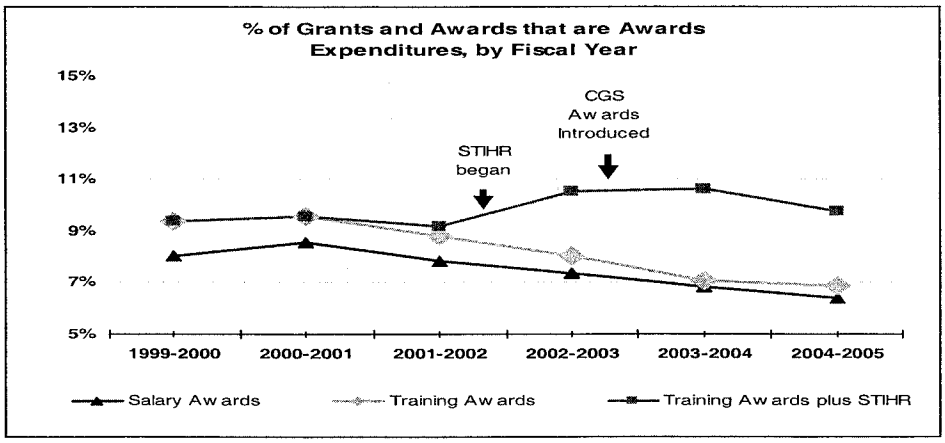
What was planned:
"Over the next three years, CIHR will build a robust Investigator Support program designed to equip Canadian trainees and young investigators with the tools that will support their future success as Canadian researchers."

What was achieved:
Through the STIHR (see above) CIHR helps young trainees and investigators develop career development skills such as grant writing and peer review. CIHR- and Institute-funded training programs such as Doctoral research awards, a number of different fellowships and the Canada graduate scholarships (Masters and Doctoral awards) continue to provide professional skills development to researchers and investigators, including trainees and young investigators. CIHR continues to support the Canada site of *Science Next Wave*, a weekly online publication that covers scientific training, career development and the science job market (see http://nextwave.sciencemag.org/ca/). It is estimated that hundreds of young researchers consult this site.

The Institute of Gender and Health has established a unique partnership with the Ontario Women's Health Council (OWHC) to provide support for highly qualified investigators engaged in women's health research in Ontario. One of the main objectives of this initiative is to build capacity to conduct research in women's health. Last year, approximately $5 million was allocated to this program, providing support for three fellows and seven mid-career researchers. Recently, this program has expanded further, offering awards for master's and doctoral students as well as new investigators.

In 2004-2005 a total of 238 fellowships were funded. Fellowships are designed to provide support for highly qualified candidates at the postdoctoral (post-PhD) or post-health professional degree stages to add to their experience by engaging in health research either in Canada or abroad.

Due to priorities and the pressure to fund more and larger grants, as the graph below demonstrates, in 2004-2005 there has been a return in the overall proportion of CIHR funding dedicated to *awards* expenditures to historic levels of about 10%.



4: Utilizing Technology to Enhance Service Delivery: *Successfully Met*

What was planned:

"Beginning in April 2004, the pilot version of ResearchNet, a Canadian research portal that offers electronic services and tools to support collaboration and information sharing amongst researchers, research organizations, government, industry and the public, will be launched. It will link to the previously created Canadian Research Information System (CRIS), and the Common CV. It will also feature a Peer Review Pilot, which allows for the electronic submission and distribution of external/internal reviews to committee members and applicants."

What was achieved:
The functionality of the ResearchNet online peer review system was improved in 2004-2005. An online 'paperless process' for the registration and application processes was launched for the March 2005 Operating Grant competition (behavioural and neurosciences competitions). In addition, the Behavioural and Neurosciences eRegistration/Submission pilots were integrated with the ePeer Review pilots to improve and streamline interactions with Committee members. For information on the paperless eRegistration and eApplication processes, see http://www.cihr-irsc.gc.ca/e/25807.html

A pilot peer review project was launched in collaboration with four Natural Sciences and Engineering Research Council (NSERC) peer review committees. The collaborative pilot project with NSERC is proving to be an excellent testing ground for collaborative efforts on ResearchNet.

The number of Peer Review Committees using the ResearchNet increased to 19 in 2004-2005. Eighty percent of external reviews and ninety-two percent of committee reviews were received online. There was a 96% compliance rate for the paperless registration process, and a 98% compliance rate for the online application process. The collaborative pilot project with NSERC led to development of a draft approach and design for further collaborative opportunities, for consultation with possible partners next year.

5: Enhancing Inter-agency Coordination and Collaboration: *Successfully Met*

What was planned:
"CIHR will continue to work with NSERC and SSHRC on a tri-agency and research community working group, to implement Phase Two of the *Memorandum of Understanding on Roles and Responsibilities* project, introduced in June 2002. Phase Two involves the development of nine additional schedules, aimed at clarifying roles and responsibilities of the partners and the agencies as they pertain to specific issues (e.g., peer review, ethical review, financial management). The working group is planning to consult with the general research community and present the proposed schedules in April 2004, and finalize the *Memorandum of Understanding on Roles and Responsibilities* during 2004-2005."

What was achieved:
Phase I of the tri-agency *Memorandum of Understanding on Roles and Responsibilities* provides useful background information on this initiative, see http://www.nserc.ca/institution/mou_e.htm. The working group has finalized the nine additional schedules and will undertake a second round of consultations with the general research community in May/June 2005 to present the proposed schedules, with plans to finalize Phase Two of the *Memorandum of Understanding on Roles and Responsibilities* during the summer of 2005.

Over the past year, IGH has demonstrated leadership jointly with the CIHR Vice President (Research) in the area of fostering women's research careers. In partnership with numerous national organizations and funding agencies (e.g. AUCC, NSERC, SSHRC, CFI, CRC, Genome Canada, Health Canada, HSFC, NCIC), IGH promoted discussions on effective strategies for the recruitment and retention of outstanding women researchers who face gender-based constraints in their careers. This is the first

collaboration of its kind in the world, focused on research training and capacity building for women scientists. The Science Advisor to the Prime Minister, Senators, and the Minister of State for Public Health are supporting this collaboration. IGH coordinated and contributed to: a National Steering Committee with ten national research funding agencies, international exchange programs, and expert roundtable meetings. Prominent speakers at four national roundtables have included Nicole Dewandre (Women and Science, European Commission), Dr. Nancy Lane (Cambridge University), Dr. Nancy Hopkins (Harvard University), and Dr. Arthur Carty (Science Advisor to the Prime Minister). These combined efforts are helping to make women's research careers a priority for CIHR and other national funding agencies.

The Common CV Network (CCV) is a collaborative effort between Canadian research funding organizations to provide a facility for researchers and students to create a curriculum vitae (CV) that can be used to apply to multiple funding agencies, thereby creating a national repository of researchers' and students' CV information. CIHR is the lead agency for this initiative. Thirteen organizations are currently working together to share in the delivery of the Common CV. The targets are 40,000 researchers to be registered, and 20 funding organizations and 10 research institutions to subscribe to the Canadian CCV. As of March 2005, there are 31,850 registered CCV users, 11 funding agencies and 10 research organizations subscribed to the CCV.

Other ongoing tri-agency areas of collaboration include the *Financial Data Submission and Reconciliation* project, an eSubmission initiative that allows host institutions such as hospitals, universities and research centres to submit their annual *Tri-agency Grants in Aid of Research* statement of accounts forms to the three agencies. CIHR also participated in tri-agency efforts to review and harmonize grants and awards financial administration guidelines and documents; financial monitoring programs and visits to host institutions; and presentations to host institutions.

6: Building Research Capacity in Universities: *Successfully Met*

What was planned:
"In collaboration with the federal funding agencies (NSERC and SSHRC), CIHR will invest in research capacity building through the *Canada Research Chairs Program* and the *Canada Graduate Scholarships Program.* CIHR will administer investment in the Canada Research Chairs Program of $83.6M in 2005-2006, $98.6M in 2006-2007 and $103.6 M in 2007-2008. Canada Graduate Scholarship amounts will equal $5.5 M in 2004-2005; $8.5 M in 2005-2006; and $10.5 M in 2006-2007."

What was achieved:
In 2004-2005, CIHR administered the following investments: the Canada Research Chairs program - $60.6 M; the Canada Graduate Scholarships program - $5.2 M; other training awards - $42 M; other salary awards - $40 M.

Results:
The Canada Research Chairs Program (CRCP) is a key component in Canada's strategy to become a world leader in the knowledge-based economy. A recent evaluation of the overall CRCP[5] states that " Chairs reported significant increases in research productivity and number of highly qualified personnel being trained at the graduate level since their Chair awards compared to other researchers over the same time period. Also, Chairs reported research impacts such as patents, inventions and potential health treatments. However, these impacts can only be partly attributable to the Chairs program due to the short time since the award of most Chairs. The infrastructure support available from the Canadian Foundation for Innovation (CFI) as a component of the Chairs' program was seen as key to the success of the program and as critical to the attraction of top researchers (particularly for CIHR and NSERC disciplines) from outside Canada."

7: Advancing Research that is Relevant to Official Language Minority Communities: *Successfully Met*

What was planned:
"CIHR is committed to supporting health research related to issues facing official language minority communities (OLMC). CIHR has appointed a research champion to advance work in this area, and held an invitational workshop in March 2004, titled "Needs, Gaps & Opportunities: Improving Access to Health Services for French and English Speaking Minorities," with over 40 stakeholders from across Canada to discuss pertinent issues and to define a health research agenda. Following this meeting, a multi-year action plan is being developed to respond to the needs of the minority language communities."

What was achieved:
CIHR's multi-year action plan in this area resulted in inclusion of the OLMC theme in seven Requests for Applications (RFAs), including the inaugural fall 2004 competition, Partnerships for Health System Improvements. The OLMC theme was also included in the mandate of eight relevant peer review committees. CIHR contributed financially to the first national forum on OLMC research *Forum national de recherche sur la santé des communautés francophones en situation minoritaire*, in December 2004. A research project was also funded to describe the state of research on the health of minority francophone communities. The report, entitled *État de la recherche sur la santé des communautés francophones en situation minoritaire*, (to be published in 2005) will help guide research initiatives and fine-tune CIHR's research agenda in this field.

CIHR established the Consultative Committee on Official Language Minority Communities. The first meeting was held in December 2004. This Committee has the mandate to provide strategic and expert advice to CIHR on the health research agenda related to OLMC and to establish an action plan to develop a competitive research capacity.

[5] Fifth-Year Evaluation of the Canada Research Chairs Program, prepared by R.A. Malatest & Associates Ltd., December 2004

Strategic Outcome #3: Transforming Health Research into Action

- Overall resource allocations to this strategic outcome: planned spending $21.8M; actual spending $18.8M

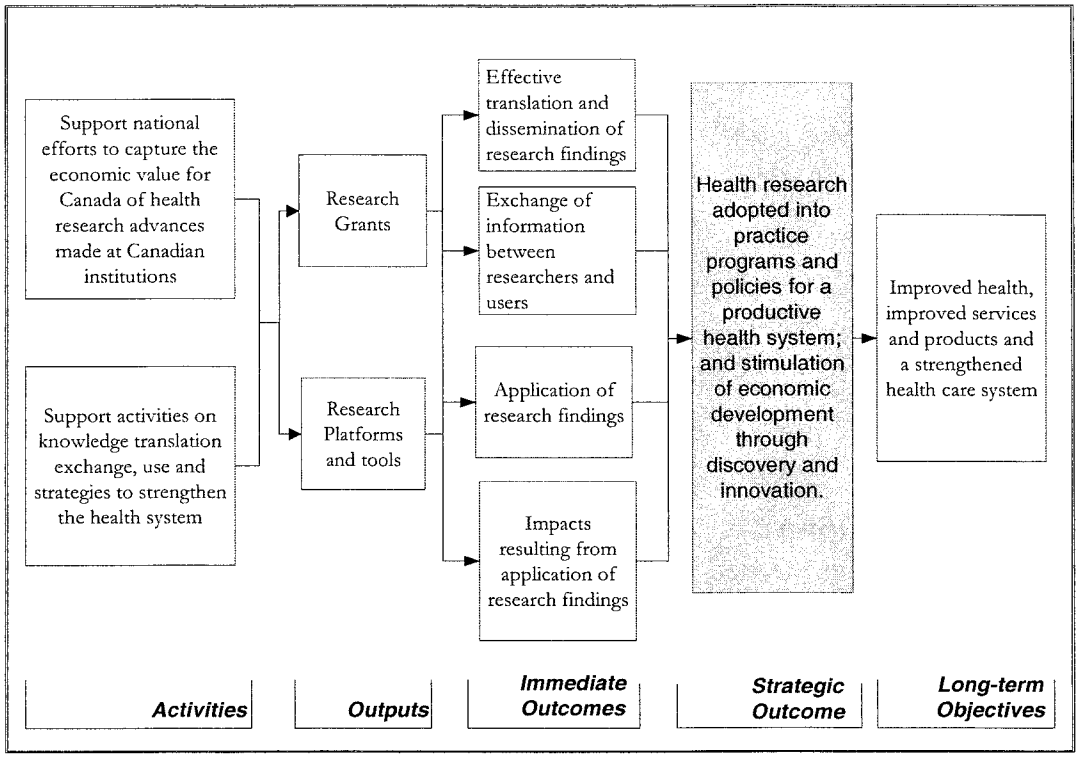
CIHR's knowledge translation (KT) strategy aims to accelerate the transformation of research results into health benefits for Canadians and an improved health care system through effective action. This includes supporting knowledge translation research, building knowledge translation networks, and enhancing the knowledge translation field. CIHR also plays a role in helping to move promising new research breakthroughs toward potential commercial applications. CIHR's knowledge translation mandate and strategy may be viewed at http://www.cihr-irsc.gc.ca/e/8505.html

Putting health research discoveries to work for Canadians requires that new knowledge be shared, its practical potential tested, and any resulting improvement in health services, policies or products be promoted, adopted and used. In addition, research may offer social and commercial potential that should be developed and exploited to the benefit of Canadians. There are often economic, employment and other benefits that can be realized through such endeavours. CIHR continues to develop capacity to understand and promote knowledge translation.

This Strategic Outcome is directly connected to Outstanding Research (Strategic Outcome #1). It is also connected to Enabling Outcome #1, Effective Partnerships and Public Engagement, including collaborations and partnerships with industry, universities and international organizations.

As shown in the logic model below, the achievement of this outcome will lead to the following results for Canadians:

- effective translation and dissemination of research findings;
- exchange of information between researchers and users;
- application of research findings; and
- impacts and benefits (health, health system and socio-economic) resulting from application of research findings.



Risks and Challenges

In achieving results in the knowledge translation (KT) outcome area, CIHR is challenged by the need to work with a multitude of players involved in the process of innovation and the relative shortage of Canadians specialized in knowledge translation. The risks of inadequately addressing these challenges are that Canadians would not benefit as fully or as quickly as they should from the new knowledge produced through research.

CIHR is responding to these challenges and risks by:

- supporting synthesis reports, research policy interface symposia, collaboration with policy influencers in development of RFAs, and intervention research across the full spectrum of health research;
- recognizing and valuing KT activities in its evaluation processes for grants and awards, and requiring that plans for dissemination and exchange are components of applications for funding;
- increasing support for existing research activities that have a strong KT component, such as programs that have potential application in programs, practices or policies or have commercialization of research as their major goal;
- supporting research into the art and science of knowledge translation itself through strategic initiatives and the open competition; and
- developing innovative funding schemes and partnerships that focus on KT in the context of health system reform, or commercialization initiatives such as Proof of Principle, Small and Medium Sized Enterprise research support and Intellectual Property Management.

Strategic Outcome #3: Transforming Health Research into Action
Report on Activities 2004-2005

1: Supporting Knowledge Translation Research: *Successfully Met*

What was planned:
"CIHR will fund grants in 2004-2005 that support KT research in: the basic science of knowledge translation; KT intervention development, ramp-up, and sustainability research; evaluative research; and syntheses of evidence for application by a range of users (e.g. program administrators, policy-makers, clinicians). CIHR will also develop KT-related research capacity through open awards and support of Institute-based or Cross-Institute Strategic Initiatives, as well as encourage recognition for science-based KT activities in universities and research-institutes."

What was achieved:
In 2004-2005, 14 grants were funded under the *Knowledge Translation Strategies for Health Research* strategic initiative. The specific objectives of this strategic initiative are:

- to increase understanding of the theory and practice of knowledge translation;
- to create new knowledge translation tools and strategies that are aligned to CIHR Institutes and their research priorities and to support the development of valid and reliable measures to evaluate their impact and effectiveness; and
- to integrate an understanding of knowledge translation principles and practice into training and continuing education.

Many Institutes launched strategic research initiatives supporting knowledge translation in 2004-2005. Examples include the *Partnerships for Health System Improvement* and the *Reducing Health Disparities* RFAs, both of which emphasize knowledge translation research. The Partnerships for Health System Improvements initiative was announced in September 2004. The purpose of this initiative is to support teams of researchers and decision-makers interested in conducting applied health research useful to health system managers and/or policy-makers over the next two-to-five years. Knowledge Translation is embedded in the design of the initiative. http://www.cihr-irsc.gc.ca/e/24797.html.

Another example is the *Genomic Medicine* RFA issued by the Institute of Genetics. This was the largest funding program initiated by the Institute in 2004-2005, with a total commitment of $10 million from multiple partners, including five other Institutes, the Foundation Fighting Blindness, and the Heart and Stroke Foundation of Canada.

A good Knowledge Translation example is the project *From evidence to action: Addressing challenges to knowledge translation in regional health authorities,* led by Patricia J. Martens. This project aims to develop a tool to assess barriers to evidence-based planning and decision-making in Regional Health Authorities (RHAs), apply the co-created tool in all RHAs within the province of Manitoba, evaluate the effectiveness of this tool across RHAs with varying characteristics, and produce user-friendly resources for use by other RHAs and health districts across Canada.

As well, The Institute of Neurosciences, Mental Health and Addictions has developed an interactive website www.thebrain.mcgill.ca as a tool to inform students and the general public about the brain, its organization and diseases related to it. The site is very popular with students as well as with university professors, who find it useful in course preparation. It has won several international web awards for excellence.

2: Contributing to Building Knowledge Translation Networks: *Successfully Met*

What was planned:
"In 2004-2005, CIHR will provide advice and co-fund, in collaboration with external sponsors and stakeholders, strategic initiatives that build or strengthen KT networks and maximize KT potential. CIHR will also contribute to building much needed KT networks by launching a strategic initiative, Networks for Health Innovation, with competitively awarded long-term grants, to enhance the relevance and applicability of health research investments."

What was achieved:
The CIHR Knowledge Translation award recognizes merit in an exceptional individual or team currently involved in a collaborative health research or development project that aims to advance and expand the understanding of knowledge translation and also leads to improved health for Canadians, more effective health services and products and a strengthened health care system. This year's recipient, the Canadian Neonatal Network (CNN; see http://www.cihr-irsc.gc.ca/e/25572.html), is an outstanding example of a collaborative knowledge translation initiative at the ground level. The Canadian Neonatal Network, described as "the archetype of the knowledge translation network in Canada," is internationally recognized as a source of benchmarking data, a driver for change and a powerful team-building force. Information from the CNN database has led one institution to reduce its incidence of infections by half, while its findings regarding retinopathy of prematurity will halve the number of infants routinely screened and reduce costs by more than $1 million each year.

Another example is the Knowledge Exchange Task Force (KETF) established by the Institute of Musculoskeletal Health and Arthritis. IMHA recognized the tremendous contribution that patients/consumers make towards creating a research agenda that addresses the most pressing health issues of the day by establishing the KETF in November, 2004. The task force envisions the development of a new and innovative approach to creating a communication pathway linking researchers and key stakeholders. In turn, the key stakeholders become research ambassadors for the program and expedite dissemination of key research findings and conclusions to their respective organizations and communities.

Over the year, CIHR funded numerous knowledge translation workshops and symposia. These events are designed to encourage user exchanges between the users of health knowledge. Many of the workshops and symposia, supported by the Institutes, focused on knowledge translation. For instance, the IGH Annual Workshop for Research Trainees in October 2004 emphasized knowledge translation and community-based research.

3: Advancing a Comprehensive Commercialization Strategy: *Successfully Met*

What was planned:
"CIHR will support a suite of programs and policies that are focused in three areas – mobilizing research, developing people and careers, and building partnerships."

What was achieved:
The CIHR Proof of Principle program (POP) Phases 1 and 2 funded 23 projects in 2004-2005 (21 Phase 1 projects and 2 Phase 2 projects). CIHR POP Phase I grants support research designed to establish proof of principle of an invention or discovery. It strengthens the commercial viability of health research at universities and research hospitals and facilitates the efficiency of commercial transfer of knowledge and technologies by attracting new investment and creating new science-based businesses. The CIHR POP Phase II grants fund follow-on proof of principle activities in partnership with a non-academic investor. This funding opportunity is aimed at providing a platform to better enable the academic institution/researcher to move the discovery further down the innovation pipeline. POP continues to be heralded as groundbreaking and has been described by other organizations including the US National Institutes of Health (NIH) and the Medical Research Council (Technology) in the UK as unique and filling a critical gap.

In 2004, a pan-Canadian Network of Chemical Biology was established. The CIHR Network for Chemical Biology Grant - Chemical Libraries and Informatics Support will enable a consortium of academic high-throughput screening laboratories to collectively acquire chemical and natural products libraries and develop the appropriate informatics and infrastructure support to make these and existing libraries accessible to the whole network. This network enables these high- throughput labs, largely funded by the Canadian Foundation for Innovation (CFI), to harness the power of chemical libraries and expertise, providing target validation capacity (an essential prerequisite to commercialization) of the most promising candidates identified from basic research.

Early in 2004 a unique proposal to establish a new effort to better harness the country's commercial advances in stem cell research was submitted to CIHR (among others). The proposal to undertake a feasibility study to create a biotechnology company (StemCellCo) geared to commercialize Canadian stem cell technologies and innovations was successfully peer reviewed by CIHR in 2004. With CIHR as the lead funding organization, this project has also received support from NSERC, several universities and research hospitals, as well as some regional economic development agencies including Western Economic Diversification. This new commercial model, if successful, may have profound impact on how future health innovations can be bundled, strengthened, and more successfully commercialized with enhanced returns on investment to industry and to Canada.

The management of health research innovations has been identified as a gap in the research translation pathway in Canada. In order to move the fruits of academic research from the bench to the marketplace, health research technology managers with specific training in business evaluation and decision-making are essential. In 2004, CIHR launched the Commercialization Management Grants program whose purpose is to further strengthen Canada's research translation sector by allowing Technology Transfer

Offices and Industry Liaison Offices of universities and research hospitals across Canada to recruit up to two recent MBA graduates to work at the institution in commercialization management. It is expected that this targeted investment will facilitate the professional development of the fellows and enable universities and their affiliated hospitals to better manage the intellectual property arising from health research. CIHR received 16 applications in 2004-2005 and was able to fund 10 proposals. This request for applications was met with an enthusiastic response and will be re-launched in June 2005.

CIHR will also launch the Science to Business (S^2B) program in June 2005. This funding will facilitate and encourage Canadian business schools to recruit PhD scientists in health research to participate in a health/biotech stream MBA. The long-term goal of the program is to strengthen the Canadian health research translational landscape by developing a cadre of scientifically knowledgeable entrepreneurs, executive and senior operating managers and venture capitalists. This program will fundamentally foster an entrepreneurial culture within the research community with PhD/MBA candidates who can move into the private sector or remain in the research institution.

The Randomized Controlled Trials mentoring program was established in 2003-2004 and re-launched in 2004-2005. The program provides funding to a mentor and mentee with the objective of developing future leaders in trials research who can direct the conception, design and implementation of randomized controlled trials. In this mentoring program, investigators will learn how to initiate and conduct high quality randomized controlled trials (RCTs) from experienced mentors in highly active trial centres. The immediate aim of this mentoring program is to enable the mentee to independently develop and submit to CIHR a randomized controlled trial outline or full application at the end of the mentoring program. CIHR funded eight mentor/mentee pairs in 2004 and 18 applications have been submitted for the 2005 request for applications.

4: Enhancing the Impact of University/Industry Relationships: *Successfully Met*

What was planned:
"CIHR will continue to work closely with its stakeholders to enhance the commercial viability of research, thereby more effectively moving innovations from laboratories and offices to the marketplace and clinics. Partners include: NSERC, SSHRC, Canada's Research-Based Pharmaceutical Companies (Rx&D), member companies of BIOTECanada, Western Economic Diversification, and an increasing number of start-up and spin-off companies."

What was achieved:
In 2004-2005, CIHR, NSERC and SSHRC re-launched the tri-agency IPM program, re-named Intellectual Property Mobilization (formerly Intellectual Property Management). This Intellectual Property Mobilization program, initially launched in 2001, provides critical funding for infrastructure support and training initiatives to Canadian technology transfer offices in academic institutions and teaching hospitals. IPM grants are intended to strengthen the ability of these institutions to manage their intellectual property, attract potential users, and promote the professional development of intellectual property personnel through a more collaborative and networked approach.

Through the tri-agency tech transfer initiative, pilot projects in management for health professionals were conducted with tech transfer offices and MBA programs, facilitating the implementation of professional management at the university/industry interface.

Commercialization and research development in health research innovations is receiving increasing interest from provincial ministries. CIHR is working with federal regional offices as well as provincial ministries to encourage an environment that strengthens development and commercialization from a Canadian base.

Together with the National Research Council, CIHR is collaborating with IRAP (the Industrial Research Assistance Program) and intends to work with TPC (Technology Partnerships Canada or its new iteration) to enable a smoother interface between promising academic research, early stage company start-up, and subsequent company growth and later stage commercialization.

CIHR actively participates in advisory boards, workshops and think tanks, interface conferences such as BIO and BIOQuébec, trade shows, international trade missions, meetings with senior officials in universities and hospitals, and other opportunities to promote and advance research-industry collaboration with and commercialization possibilities. In addition, CIHR supports and participates in the BioContact Symposium, aiding in the establishment of the BioContact/CIHR Next Generation Award competition.

CIHR is also working actively with other national health research agencies discussing best practices and common challenges in the area of health research translation and early stage commercialization gaps.

In collaboration with the Ontario Ministry of Economic Trade and Development and the Health Technology Exchange (HTX), a program was launched in Ontario to enable the emerging assistive medical device industry. This program supports commercialization of medical and assistive devices emerging out of Ontario's public research institutions, development of start-up companies, growth of small to medium-sized enterprises (SMEs), and expansion of export markets for Ontario's medical and assistive device products.

Analysis of Performance by Enabling Outcome

In addition to the three Strategic Outcomes, CIHR's *Report on Planning and Priorities* includes two Enabling Outcomes: *Effective Partnerships and Public Engagement*, and *Organizational Excellence*. These Enabling Outcomes contribute to the realization of the Strategic Outcomes, and are key factors in the effective performance of the organization.

Enabling Outcome #1: Effective Partnerships and Public Engagement

- Overall resource allocations to this enabling outcome[6]: planned spending $27.8M, actual spending $26.5M

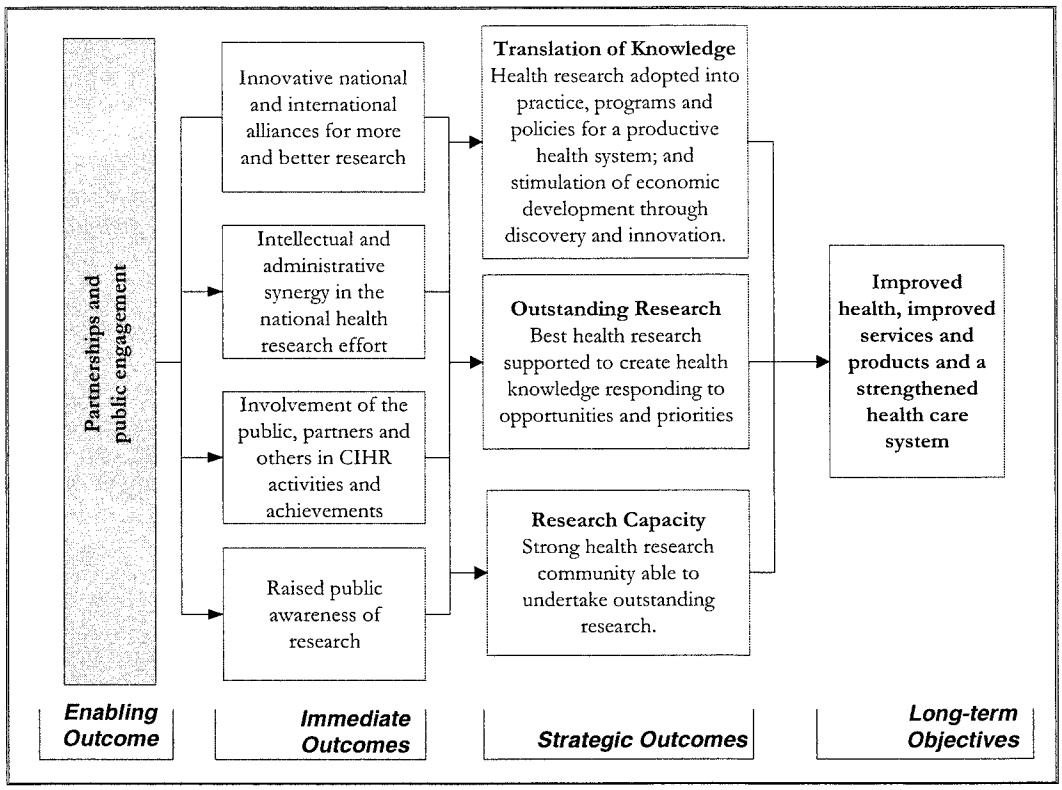
Partnerships enable sharing of different perspectives and pooling of resources to achieve critical mass and synergy. They lead to coordinated efforts and optimal use of resources. CIHR has created a strong committee and staff structure to maintain the partnerships it has already formed and to negotiate new ones, in Canada and internationally. The increased commitment to health research by the federal government is echoed by CIHR's key partners. CIHR and its Institutes have more than 160 established partnerships, which cover a range of activities, including capacity building, priority research and use of research results for clinical practice, health services, health policy or commercialization.

Partnerships and Public Engagement is directly connected to all three Strategic Outcomes, i.e., partnerships and collaborations help enable delivery of: Outstanding Research (Strategic Outcome #1), Outstanding Researchers in Innovative Research Environments (Strategic Outcome #2) and Transforming Health Research into Action (Strategic Outcome #3).

As shown in the logic model below, the achievement of this outcome will therefore lead to the following results for Canadians:

- innovative national and international alliances for more and better research;
- intellectual and administrative synergy in the national health research effort;
- involvement of the public, partners and others in CIHR activities and achievements; and
- raised public awareness of research.

[6] The value of the partnership planned spending reflects only CIHR's contribution to partnered programs and does not include the partners' contribution.



Risks and Challenges

In seeking and maintaining partnerships and public engagement, the challenges facing CIHR are:

- to identify and engage the right partners for research at the right time;
- to identify the most important areas for partnering, and to ensure adequate 'reach' into key health research areas; and
- to ensure that partnership commitments do not overextend CIHR with commitments beyond the organization's capacity.

If these challenges are not addressed appropriately, the associated risks to CIHR are:

- ineffective or inappropriate partnership arrangements;
- missed opportunities for collaboration, and/or support for arrangements of less strategic or practical importance; and
- insufficient resources (financial, human) to provide adequate levels of support to partnerships and collaborative arrangements.

In order to help face these challenges and mitigate these risks, CIHR is working to:

- develop a comprehensive database of partners;
- clearly identify roles and responsibilities of each organization in joint endeavours;
- enhance financial systems to improve long-term planning projection and analysis for partnerships;
- monitor performance to ensure delivery on commitments; and
- communicate with all partners in an open and transparent fashion.

Enabling Outcome 1: Effective Partnerships and Public Engagement
Report on Activities 2004-2005

Partnerships are increasingly the way that health research stakeholders do business, and they are a key to CIHR's success in achieving its vision for the future. In the past three years, CIHR has developed strategic partnerships with a range of organizations including other federal government departments and agencies, provincial research funding agencies and relevant provincial and territorial departments, health charities, professional associations, other non-governmental organizations, and industry. CIHR's partners help set research priorities, share best practices in research and its peer review, build research capacity, leverage knowledge translation efforts and make more effective use of resources for research. CIHR will seek to expand its partnership base – reaching out to stakeholders and the public to ensure it responds to the needs of the health research community and Canadians in a coordinated and effective manner.

1: Developing and Supporting Partnerships: *Successfully Met*

What was planned:
"CIHR will aim to strengthen relationships with the provincial research funding agencies and health ministries. To support this effort, CIHR will create materials and tools to facilitate communication and develop a comprehensive partnership database in 2004-2005."

What was achieved:
CIHR's efforts to develop and support partnerships led to the establishment of more than 160 research-related partnerships and to strengthening relationships with provincial health funding organizations and ministries. For more information on CIHR partnerships see http://www.cihr-irsc.gc.ca/e/27359.html

A partnerships database was also developed. A second phase of this project will lead to a comprehensive database that will be fully implemented in 2005-2006.

The more than 160 partnerships were established with the voluntary sector, industry, provincial bodies, federal departments and agencies. Through these projects, these partners committed approximately $87 million in 2004-2005 alone. Also in 2004-2005, the Health Research Partnership program was transformed into the Small Health Organization Partnership program, involving more than twenty organizations.

Through the Partnerships for Health System Improvements (see Strategic Outcome #1, above), CIHR made particular strides in establishing partnerships with a number of provincial health research organizations.

One example is a partnership with the Ontario Ministry of Health and Long-Term Care. Matching funds, to a maximum of $100,000 per project, are available for successful applications. Funding is provided for Ontario researchers and decision-makers only. Consideration may be given to multi-jurisdictional projects where at least one principal investigator resides in Ontario and where the outcome of the research is determined to be of direct benefit to Ontario.

This funding opportunity to support research projects was developed and previously managed by the Canadian Health Services Research Foundation (CHSRF). The purpose of this initiative is to support teams of researchers and decision-makers interested in conducting applied health research useful to health system managers and/or policy-makers over the next two-to-five years.

In 2004-2005, the Canadian Psychiatric Research Foundation and AstraZeneca Inc. were the recipients of the CIHR Partnership Award. The Canadian Psychiatric Research Foundation (CPRF) is Canada's only charity focusing on psychiatric research. A small organization, the Foundation struggled for years to attract researchers and establish a profile to champion research on mental health and addictions. AstraZeneca Canada Inc. came forward to suggest a partnership designed to support and encourage young researchers and celebrate their achievements. Together with CIHR's Institute of Neurosciences, Mental Health and Addiction and the CIHR/Rx&D Research Program, they funded four senior investigator awards. As a result of this innovative partnership, the number of applications for funding to CPRF doubled.

2: Developing Partnership Guidelines: *Successfully Met*

What was planned:
"With the number and range of partners involved in health research increasing, and with organizations forming multiple partnerships with CIHR or individual Institutes, CIHR has recognized a need to have a common framework for research partnerships. To this end, in 2004-2005 CIHR will collaboratively develop and implement a comprehensive partnership policy and framework."

What was achieved:
A *Partnership Guidelines and Resources* document which serves as the framework for research partnerships has been drafted and is in the final stages of preparation, for release in 2005-2006.

Once in place, *Partnership Guidelines and Resources* will promote better understanding of roles and responsibilities, consistency and coherence in partnership arrangements, and effectiveness and efficiency of partnership initiatives.

3: Enhancing International Collaboration: *Successfully Met; Exceeded Expectations In Some Areas*

What was planned:
"Health research is a global enterprise, and, as such, CIHR will continue to build international partnerships and alliances to support international research and training projects over the next three years, including:

- CIHR will re-launch the International Opportunities Program (IOP) in 2004-2005, which supports Canadian researchers in international research projects.
- CIHR Institutes will continue to seek out opportunities to form international alliances and networks over the next three years, and continue with international partnerships advancing research of strategic importance, including: cardiovascular and respiratory diseases (US National Institutes of Health); Aboriginal Health Disparities (Australia and New Zealand); and HIV/AIDS (UK).
- CIHR's involvement in an international partnership to fund the International Structural Genomics Consortium will continue through 2004-2005.
- CIHR will also continue its involvement in the Global Health Research Initiative, a partnership with the International Development Research Centre, the Canadian International Development Agency and Health Canada, to strengthen health research capacity in Canada and developing countries."

What was achieved:
With the addition of several international alliances and the continuation of others, it can be said that CIHR successfully achieved its commitments in the area of international collaboration. In 2004-2005, new agreements included signature of a Memorandum of Understanding (MOU) between CIHR and the Mexican National Institute of Health; and between CIHR and the Indian Council for Medical Research. CIHR continues to work in the framework of existing international partnerships advancing research of strategic importance, including: cardiovascular and respiratory diseases (US National Institutes of Health); Aboriginal health (Australia and New Zealand); HIV/AIDS (UK); gender and gender health (Latin America, Asia, South Africa, US); and reducing health disparities (UK, Australia, Mexico, US). CIHR's involvement in an international partnership to fund the International Structural Genomics Consortium continued through 2004-2005.

Under the International Opportunities Program in 2004-2005, 23 Development/Planning grants and four (4) Collaborative Research Grants were funded.

In 2004-2005 there were some 44 agreements in place between CIHR Institutes and international partners.

CIHR continued its involvement as part of a unique partnership with the Canadian International Development Agency (CIDA), the International Development Research Centre (IDRC) and Health Canada known as the Global Health Research Initiative (GHRI). These four agencies bring expertise to bear on health problems in developing

countries and global health priorities: CIHR with its strong tradition of excellence in research through the peer-review process; Health Canada with its knowledge base and recognized leadership; IDRC with its experience in research in developing country settings; and CIDA with its development experience and its emphasis on evidence-based health development.

The Institute of Public and Population Health is the lead CIHR Institute in the GHRI. Other Institutes involved include the Institute of Gender and Health, Institute of Neurosciences, Mental Health and Addiction, Institute of Infection and Immunity, and Institute of Circulatory and Respiratory Health.

The GHRI agreement between CIDA, Health Canada, IDRC and CIHR serves as a framework for activities aimed at identifying mechanisms of collaboration including: parallel funding of different components of joint research programs; joint review of projects and programs through participation in relevant approval committees; and co-funding of international health research projects and programs.

Under the agreement, and in partnership with the IDRC on two CIHR-led programs, Global Health Research Planning and Research Program Development grants program and Global Health Research Pilot Project grants, CIHR has contributed $5.3M Cdn ($4.1M US using 2004 exchange rate) to seed the development of robust and sustainable partnerships with collaborators in low and middle income countries (LMICs). For information concerning the Global Health Research Initiative, see http://www.cihr-irsc.gc.ca/e/7350.html

In 2004-2005, CIHR launched the new Canada-HOPE Scholarships program. The goal of this program is to enable promising scientists and clinicians from low and middle income countries, as identified by the Canadian International Development Agency and the United Nations, to be mentored by prominent Canadian researchers and to be exposed to some of the best science, laboratories and training environments in Canada. The objective of this initiative is to develop research training opportunities with the potential to lead to the development of sustainable research programs to help people in developing countries. The pilot round of this program will focus on sub-continental South Asia. It is the intent to gradually expand the program to other regions of the world.

4: Promoting Science to Canadian Youth: *Successfully Met*

What was planned:
"CIHR supports activities to expose Canadian youth to scientific discovery and to make them aware of career opportunities in research. CIHR will create opportunities in collaboration with partners in 2004-2005, such as continuing to support the Youth Science Foundation, to interest Canadian youth in science."

What was achieved:
From its beginning, CIHR has sought partnerships with key organizations that promote science to Canadian youth. CIHR is an ongoing sponsor of the Youth Science Foundation's showcase event, the Canada-wide Science Fair http://www.ysf-fsj.ca/Who/Mission/ . Other examples of national and local youth-targeted events and activities to which CIHR contributed in 2004-2005 included:

- Canadian Medical Hall of Fame—Health Research Discovery Days
- Aventis Biotech Challenge – Competition and Symposiums
- Merck Frosst Canada – Neuron Minds Challenge
- Encounters with Canada – Health Research Weeks
- Chapters – Genes, Genomes and Genomics Public Events
- Canadian Museum of Nature and Genome Canada -- *GEEE! in Genome*

A Youth Engagement Strategy is under development to frame and enhance efforts to promote the study of science and research to youth. In 2004-2005, CIHR hired a Youth and Public Engagement Coordinator, and sought the input of government agencies, national science youth engagement organizations and key internal stakeholders. At this time, the guiding principles and strategic objectives are approved, and specific plans and activities are under exploration.

A highly successful example of CIHR's contribution to efforts to promote science to youth is the *Geee! in Genome* initiative. *Geee! in Genome* is an innovative, multidimensional public education project which explores the exciting new field of science known as genomics. The project is a partnership between the Canadian Museum of Nature (CMN), Genome Canada and CIHR. The *Geee! in Genome* exhibit has been visited by some 375,000 Canadians in seven regions. www.nature.ca/genome.

Enabling Outcome #2: Organizational Excellence

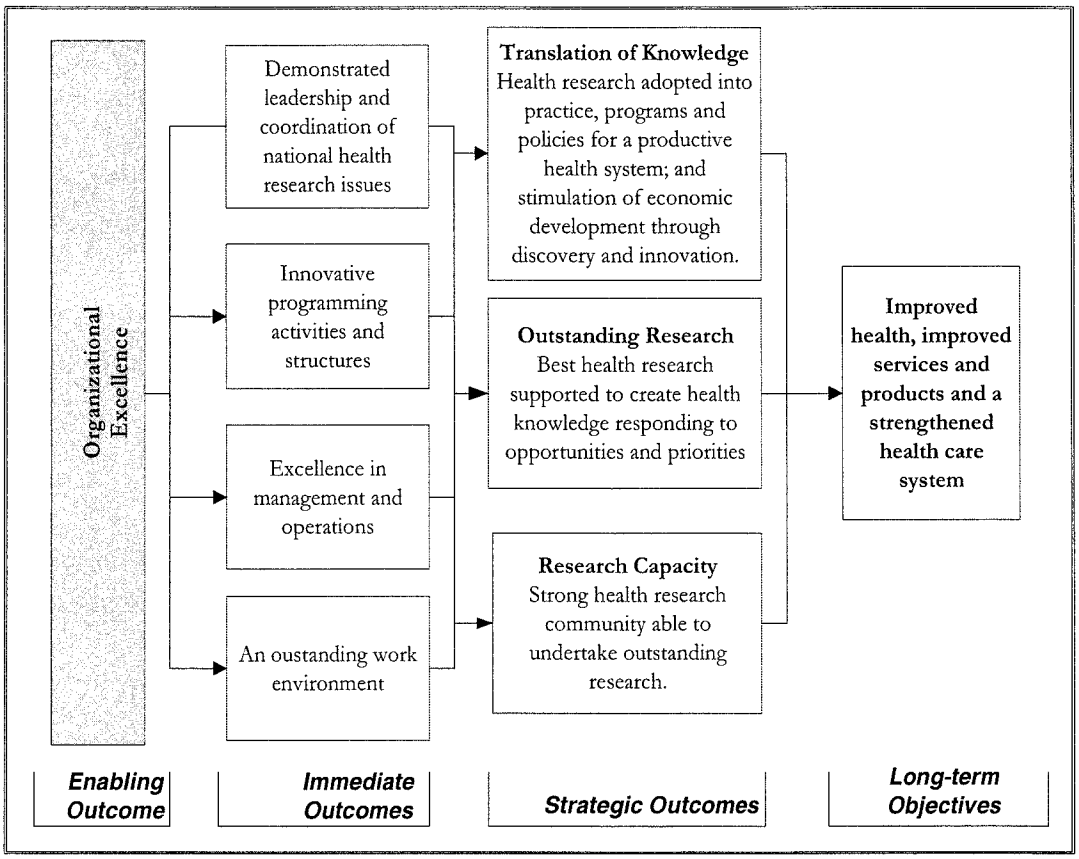
- Overall resource allocations to this enabling outcome: planned spending $45M, actual spending for 2004–2005 $43.3M.

CIHR is committed to organizational excellence as demonstrated by leadership, innovation, responsible management, continuous improvement and a quality work environment. A strong, focused organization with informed, dedicated employees provides the foundation for effective creation and delivery of programs for achievement of results.

Organizational Excellence supports success in all three Strategic Outcomes, as well as Enabling Outcome #1 (Partnerships and Public Engagement). This Enabling Outcome aims to help CIHR achieve its mandate through excellence in staff, service delivery, systems, and management. CIHR achieves program delivery excellence and impressive research results by continually strengthening its internal organization and fostering a dedicated, well-informed workforce. The organization's leadership, responsible management and continuous-improvement practices, and high-quality work environment demonstrate an ongoing commitment to organizational excellence.

As shown in the logic model below, the achievement of this outcome will lead to the following results for Canadians:

- demonstrated leadership and coordination of national health research issues;
- innovative programming, activities and structures;
- excellence in management and operations; and
- an outstanding work environment.



Risks and Challenges

In terms of achieving Organizational Excellence CIHR faces the following challenges:

- to complete the transformation from a granting council to a strategic health research agency;
- to address the challenges posed by a budget whose increase is below the increase in demand for funding; and
- to create awareness of the agency and demonstrate leadership in health research.

The risks of inadequately addressing these challenges are that CIHR may not succeed in its mission to enable and support outstanding, world-class health research in Canada. CIHR's credibility, both nationally and internationally, is intrinsically dependent on its organizational excellence.

In order to help face these challenges and mitigate these risks, CIHR is working to:

- develop a new corporate culture built around the CIHR identity;
- play a leadership role in coordinating, focusing and integrating the national health research agenda and selecting priorities for action; and
- enhance accountability and effective reporting on results throughout the organization.

Enabling Outcome #2: Organizational Excellence
Report on Activities 2004-2005

1: Advancing Modern Management Practices: *Successfully Met*

What was planned:
"CIHR has developed an action plan which includes a number of priority improvement projects, such as implementation of a risk management and control framework and an integrated planning and reporting framework. Over the next three years, senior executives will champion these projects to elevate awareness of their importance and work collaboratively with staff to ensure their completion."

What was achieved:
In line with the Government's initiative *Results for Canadians – A Management Framework for the Government of Canada*, in November 2003 CIHR launched its Modern Management Action Plan. Nineteen improvement projects were initiated, and significant progress continues to be made in each area. In 2004, a new initiative was added: 'to develop a partnership database.' A related initiative of Modern Management is the Financial Management Accountability Framework and Attestation Process, which was developed to provide the President, the Vice Presidents and the Scientific Directors (Institutes) and their managers with a means to assure those to whom they are accountable that they are carrying out their financial management responsibilities. The Financial Management Accountability Framework and Attestation Process was signed by the President and distributed to senior management in May 2004.

CIHR has taken appropriate action in 2004-2005 to comply with the phased implementation of the Public Service Modernization Act (PSMA) Bill C-25, which came into effect in November 2003; for information on this new Act see: http://www.parl.gc.ca/LEGISINFO/index.asp?Lang=E&query=3302&Session=11&List=toc .

Action includes clarification of CIHR's authority over Human Resources (HR) management; review and alignment of CIHR's HR delegation chart and CIHR financial delegation chart with the new Act; regular information pertaining to the various PSMA components via monthly HR communiqués; launch of a PSMA page on the Intranet site; and development of a *Readiness Strategy.*

The March 2005 Progress Report on CIHR's Modern Management Action Plan provided an opportunity to assess the organization's efforts to strengthen the foundations of modern management in CIHR, and identify challenges still to be addressed. Results to date include implementation of an integrated, CIHR-wide planning, budgeting and reporting cycle, and a financial management framework with integrated controls. Risk management is being embedded in new processes. CIHR managers have been provided with templates and tools for identifying risks, assessing their severity and developing risk mitigation strategies. Work on other components of the Modern Management Action Plan is ongoing, with an anticipated completion date of June 2007. A follow-up Capacity Assessment will be undertaken in the fall of 2005 to assess and demonstrate CIHR's progress over the two-year period since the initial assessment.

CIHR's Financial Management Accountability Framework and Attestation Process has proven to be an innovative strategy to support the Government's Management Accountability Framework (MAF). The Treasury Board (TB) is in the process of developing a similar directive to ensure accountability in support of the MAF and has introduced their new policy at the Senior Full-Time Financial Officer (SFFO) conference in May 2005. The Modern Management Office has discussed CIHR's approach with TB, and CIHR's Financial Management Accountability Framework and Attestation Template was forwarded to Treasury Board. Treasury Board has provided positive feedback that CIHR's Framework is very consistent with the approach they are considering and could be used as a good example of cascading expectations at the SFFO conference in 2005, and other venues.

2: Building a Committed and Productive Workforce through Recognition of Excellence: *Successfully Met*

What was planned:
"In 2004-2005 CIHR will enhance its Human Resource Management Framework through the implementation of its Job Evaluation and Compensation system. Further to the implementation of the CIHR job evaluation plan on April 1, 2004, CIHR will undertake to develop and implement in 2004-2005 a new performance management system that recognizes and rewards high performance."

What was achieved:
In 2004-2005 CIHR implemented both a new job evaluation system and a new performance management system which includes a pay-for-performance approach for most staff.

CIHR's new job evaluation approach is consistent with recognized human resources management practices, and is designed to meet the specific needs of a highly skilled, highly educated, professional workforce. As well, all CIHR employees are now subject to a Performance Management system which supports a renewed focus on performance and excellence; and over 90% of CIHR employees are subject to pay-for-performance which links performance directly to compensation. The implementation of this system represents significant change for CIHR employees and managers. The system design was based on extensive research of best practices and developed by CIHR.

As part of Performance Management, managers and employees throughout the organization developed performance objectives for the 2004-2005 year at the beginning of the cycle, conducted mid-year reviews in order to up-date employee performance plans, and reported jointly on performance results at the end of the fiscal year. Second-level Review Committees of senior managers were established to determine final global performance ratings for individual employees. These performance ratings are the basis for 2005-2006 salaries and lump sum performance awards where performance exceeds expectations. The first cycle of this new system has now been completed and there will be a thorough review of the process and the results achieved.

In late 2004, an Employee Survey was undertaken. This survey had a high response rate (67%) and indicated an overall high level of employee satisfaction. Areas for improvement include internal communication, work-life balance, working relationships, and training. In response to the results of the Survey, the President has developed and communicated an 8-point action plan and implementation is well underway. CIHR will also develop a Human Resources Strategy in 2005-2006. This strategy will take into account the issues identified in the Employee Survey.

3: Enhancing Organizational Performance Measurement: *Successfully Met*

What was planned:
"To ensure that CIHR delivers results for Canadians, all CIHR managers are expected to monitor and evaluate the performance of the programs, projects and initiatives for which they are responsible. In some cases this will involve quarterly variance reporting against plans. In other cases, specific data collection strategies will be developed to capture priority performance measures. Over the next year, CIHR managers will work together to implement a common Results-based Management and Accountability Framework – the foundation for performance measurement at CIHR."

What was achieved:
Managers in the Institutes and in Ottawa produced strategic and operational plans tied to the CIHR strategic plan, *Blueprint*, in 2004-2005. A first consolidated operational plan for all of CIHR was also created. Subsequently, all managers reported performance against these plans, submitting quarterly financial results and a semi-annual performance report against the plan. Final results are reported in such documents as management performance reviews.

Detailed five-year performance reports using the common RMAF (Results-based Management Accountability Framework) were prepared by all Institutes. All Institutes have measured their performance against the 15 common indicators within their performance measurement framework. These performance reports are an important input to the evaluations of the Institutes, taking place in 2005-2006.

An annual Institute-performance reporting exercise was developed to inform CIHR Governing Council's strategic planning retreat. The Institutes completed summary reports of their achievements in health research.

Through these initiatives, CIHR is able to conduct accurate performance measurement at all levels of the organization, including the Institutes. The data produced is consistent with Treasury Board reporting requirements, ensuring that CIHR is able to communicate its performance results accurately to all stakeholders, including the general public, external partners and Parliament.

In alignment with new Treasury Board reporting requirements, a draft MRRS (Management, Resources and Results Structure) has been created that links all CIHR programs, activities and resources to the strategic outcomes. The document provides the framework for measuring expected results and setting performance targets in order to report results for Canadians. The MRRS is in the final stages of approval.

4: Identifying the Return on Investment of Health Research: *Successfully Met*

What was planned:
"In 2004-2005, CIHR will develop a Return on Investment (ROI) framework that aligns with its mandate, priorities, and scope of activities. To determine the best way to measure ROI, CIHR will examine how this is being done in other countries and will consult with relevant stakeholders – the funders, producers and users of research."

What was achieved:
In 2004-2005 CIHR created a draft framework for measuring the impacts of health research. After research on methods used world-wide to measure return on investment and the impact of health research, a key step in the project was the organization and facilitation of a workshop on February 23 and 24, 2005, with a small group of Canadian decision-makers and researchers. Participants exchanged insights and ideas with colleagues from the United States, United Kingdom and Australia. The results of this invitational meeting have been incorporated in a synthesis report that includes a draft

framework that would enable CIHR to measure the impact of research it funds. This synthesis report and draft framework was discussed at a meeting with Canadian policy-makers and experts on May 18, 2005. CIHR is moving to finalize the framework and work with partners on associated measures that will provide a global perspective of health research returns. The "impacts framework" will also guide CIHR's future planning and evaluation activities.

5: Ensuring Strategic Positioning of CIHR: *Successfully Met; Exceeded Expectations in Some Areas*

What was planned:
"In 2004-2005, CIHR will complete and launch its comprehensive branding strategy. Following the approval of this new strategy, branding activities will be implemented over the next three years, in conjunction with the communications strategy approved in 2003."

What was achieved:
CIHR adopted a new communications strategy in 2004 which operationalized the strategy accepted in 2003. Beginning with the corporate brochure entitled *Catalyst*, the organization is building a CIHR brand that will be carried through all CIHR publications. Significant strategic positioning publications included the Annual Report http://www.cihr-irsc.gc.ca/e/25727.html in addition to a commercialization brochure http://www.cihr-irsc.gc.ca/e/23906.html and the paper corporate brochure, *Catalyst*. 6,657 copies of the corporate brochure were distributed to key stakeholders.

Targeted media activities during this period have resulted in significant coverage in Canadian print and electronic media, further contributing to public awareness of the value and impact of health research. High profile national and regional announcements involving universities, health charities and Members of Parliament also built awareness of the importance of health research funding through CIHR. Most recently, in March 2005, the Prime Minister's participation in announcing CIHR funding results played a significant role in raising the profile of CIHR (http://www.cihr-irsc.gc.ca/e/27304.html).

Media coverage of significant research results such as the INTERHEART study http://www.cihr-irsc.gc.ca/e/26489.html demonstrated the importance of following CIHR funded research through to the stage where results emerge. Other examples of media coverage include the September and January funding announcements, high profile coverage on studies such as the North American Opiate Medication Initiative (NAOMI) as well as coverage of CIHR's study on bias in findings of government-funded drug trials and Dr. Bernstein's commentary on health research in Canada, at http://www.cihr-irsc.gc.ca/e/24645.html.

In December 2004, the first monthly web profile highlighting CIHR-funded research was posted on the CIHR website. This initiative should help increase awareness of the value of health research for Canadians. CIHR's website features a media centre http://www.cihr-irsc.gc.ca/e/22967.html where journalists (and the public) are able to access current as well as historical news from CIHR.

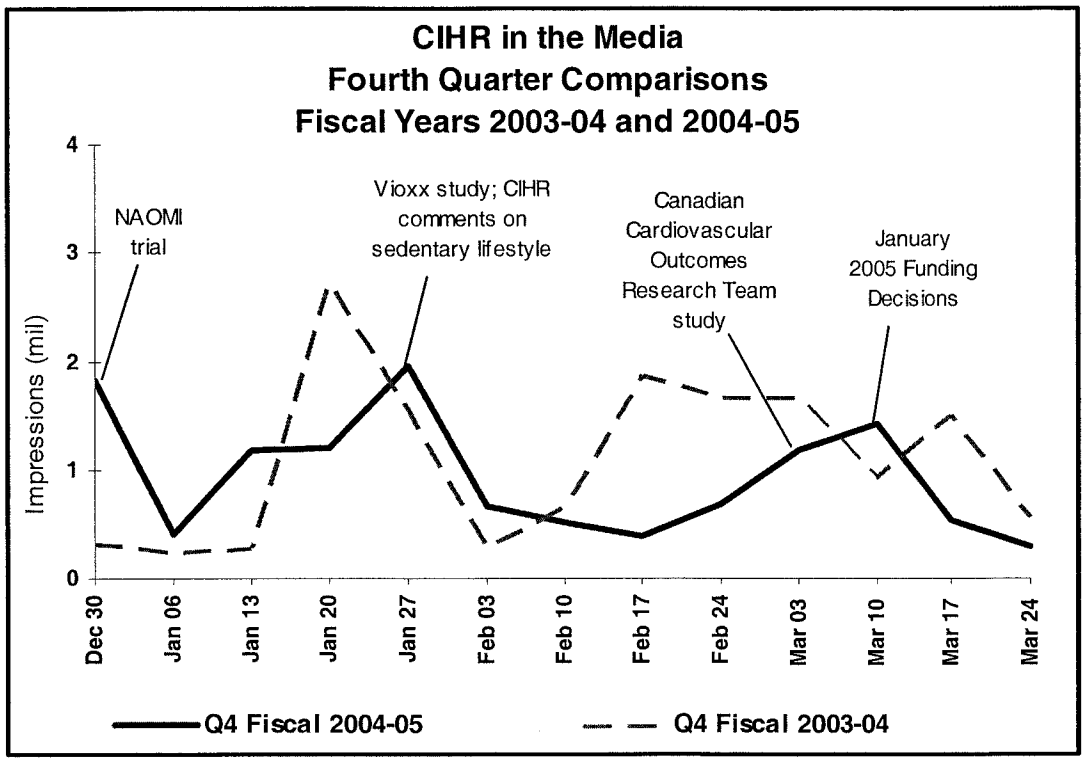
CIHR is currently working to improve awareness among researchers and institutions about the need to involve CIHR in any publicity surrounding the publishing of results, and through changes to the MOU with institutions.

The Celebration of Excellence in Health Research ceremony http://www.cihr-irsc.gc.ca/e/12398.html with Health Minister Ujjal Dosanjh generated significant exposure for CIHR. The ceremony received national media coverage in the *Globe and Mail* and *Toronto Star* as well as local media coverage in the recipients' communities.

In total, CIHR made 35 funding announcements, often including public events, in different regions across country. Such announcements, and the creative suite of communications activities and products, such as the new corporate brochure, contribute to increased public awareness of the nature and relevance of health research funding provided by CIHR on behalf of the Government of Canada.

Analysis of 2004-2005 media coverage shows that CIHR enjoyed a marked increase coverage of proactive initiatives, particularly funding announcements. The message that research benefits the health of Canadians was the most frequently asserted message in 2004-2005, appearing in 60% of all coverage.

The following graph displays information on CIHR's press activity, by week. Coverage of CIHR reached its highest peak in the first week of February, as a result of several concurrent stories, most notably a study on the negative health impact of Vioxx as well as comments of the Scientific Director of the Institute of Population and Public Health, Dr. John Frank, on sedentary lifestyle and obesity among children.



Section III: Supplementary Information

Note: These Tables compare actual spending by CIHR in millions of dollars versus planned and authorized spending. Authorized spending refers to spending levels approved by the Treasury Board of Canada. CIHR did not spend all available and planned funding in 2004-2005, lapsing $9.9 million. The lapsed funding in the grants and awards was the result of difficulties experienced by universities in filling Canada Research Chairs at the anticipated rate. Because of the financial arrangements in place for this program, there will be no impact on the capacity to fund health-related Chairs in coming years. Factors resulting in the operating surplus include: staff not being hired at the rate expected (thereby underutilizing the salary budget), projects being cancelled or not starting as quickly as planned, and efficiencies identified in the peer review committees.

Wherever 'actual' expenditures are referred to in Tables 1, 2, 3, 4, 6 or 7 on the following pages, it should be noted that these expenditures are prepared on a cash basis to compare with Parliamentary Appropriations which are cash basis budgets. Hence, the actual expenditures will not tie in with the Statements of Operations and Net Assets of the audited financial statements which are prepared on an accrual basis.

Table 1: Comparison of Planned to Actual Spending (including Full-Time Equivalents)

($ millions)	2002–03 Actual	2003–04 Actual	2004–2005			
			Main Estimates	Planned Spending	Total Authorities	Actual
Operating (includes EBP)	34.6	39.3	40.3	45.0	46.8	43.3
Grants and Awards	527.6	575.6	582.7	617.0	619.4	619.1
Networks of Centres of Excellence	25.0	25.0	25.0	25.0	25.0	25.0
Canada Research Chairs	34.2	46.3	103.6	103.6	67.6	60.6
Total	**621.4**	**686.2**	**751.6**	**790.6**	**758.8**	**748.0**

Total	**621.4**	**686.2**	**751.6**	**758.8**	**758.8**	**748.0**
Less: Non-Respendable revenue	1.6	2.8	2.6	2.6	2.6	3.4
Plus: Cost of services received without charge	1.7	2.3	2.5	2.5	2.5	4.2
Net cost of Department	**621.5**	**685.7**	**751.5**	**758.7**	**758.7**	**748.8**

Full Time Equivalents	**244.5**	**282**	**347**	**347**	**347**	**282**

Table 1 compares actual spending by CIHR in millions of dollars versus planned and authorized spending. Authorized spending refers to spending levels approved by the Treasury Board of Canada. CIHR did not spend all available and planned funding in 2004-05, incurring a surplus of $10.8 million. The lapsed funding in the Grants and Awards was the result of difficulties experienced by universities in filling Canada Research Chairs at the rate that had been hoped for. Because of the financial arrangements in place for this program, there will be no impact on the capacity to fund health-related Chairs in coming years. Factors resulting in the operating surplus include: staff not being hired at the rate expected thereby underutilizing the salary budget, projects being cancelled or not starting as quickly as planned and efficiencies identified in the peer review process.

Table 2: Use of Resources by Business Lines

2004–2005								
Business Lines – BL	Budgetary						Plus: Non-Budgetary	
	Operating	Capital	Grants and Contributions	Total: Gross Budgetary Expenditures	Less: Re-spendable Revenue	Total: Net Budgetary Expenditures	Loans, Investments and Advances	Total
CIHR's business: The creation and translation of new knowledge for improving health								
($ Millions)								
Main Estimates (including EBP)	40.3	0	711.3	751.6	-	751.6	-	751.6
Planned Spending	45.0	0	745.6	790.6	-	790.6	-	790.6
Total Authorities (**includes supplementary estimates and, adjustments**)	46.8	0	712.0	758.8	-	758.8	-	758.8
Actual Spending	43.3	0	704.7	748.0	-	748.0	-	748.0

Table 2 compares actual spending by CIHR in millions of dollars versus spending authorized by the Treasury Board of Canada and planned CIHR spending. CIHR's actual spending was $10.8 million below allotted levels.

Table 3: Voted and Statutory Items

Vote or Statutory Item	Truncated Vote or Statutory Wording	2004–2005			
		Main Estimates	Planned Spending	Total Authorities	Actual[1]
($ Millions)					
10	Operating expenditures	36.1	40.2	42.0	39.4
N/A	Capital expenditures	0	0	0	0
15	Grants and Contributions	711.3	745.6	712.0	704.7
(S)	Contributions to employee benefit plans	4.2	4.8	4.8	3.9
	Total	**751.6**	**790.6**	**758.8**	**748.0**

Table 3 illustrates the Parliament votes resources distribution to CIHR. The variance in the main estimates and the planned spending is largely due to the additional funding approved in the 2004 federal budget, the transfer of the HIV/AIDS program from Health Canada, the impact of the frozen allotment reduction exercise and a carry-over from the 2003-04 operating budget.

Table 4: Net Cost of Department

($ millions)	2004–2005
Total Actual Spending (including EBP)	748.0
Plus: Services Received without Charge	
Accommodation provided by Public Works and Government Services Canada (PWGSC)	2.4
Contributions covering employers' share of employees' insurance premiums and expenditures paid by TBS (excluding revolving funds)	1.7
Audit services provided by the Office of the Auditor General (OAG)	0.1
Less: Non-respendable Revenue	3.4
2004–2005 Net cost of Department	**748.8**

Table 5: Contingent Liabilities

Contingent Liabilities	($ Millions)	
	March 31, 2004	March 31, 2005
Guarantees	-	-
Claims, Pending and Threatened Litigation	0.8	0.8
Total	**0.8**	**0.8**

Table 5 summarizes the amount of contingent liabilities accrued by CIHR as at March 31, 2005. "A contingency is an existing condition or situation involving uncertainty as to possible gain or loss to an organization that will ultimately be resolved when one or more future events occur or fail to occur. Resolution of the uncertainty may confirm the acquisition of an asset or the reduction of a liability or the loss or impairment of an asset or the incurrence of a liability." (PSA HB 3310). These costs are estimates and subject to management judgment.

Table 6: Sources Non-Respendable Revenue

Non-Respendable Revenue

($ millions)	Actual 2002-03	Actual 2003-04	2004-2005			
			Main Estimates	Planned Revenue	Total Authorities	Actual[1]
Grants and Awards						
Refunds from previous year	1.6	2.8	2.6	2.6	2.6	3.4
Total Non-Respendable Revenue	1.6	2.8	2.6	2.6	2.6	3.4

Table 6 shows the source of non-respendable revenues, which are funds flowing to CIHR from sources other than its Parliamentary appropriation and must be passed to the Receiver General rather than being spent on programs or operations.

Table 7: Details on Transfer Payments Programs (TPPs)

1) Name of Transfer Payment Program: Grants for research projects and personnel support		
2) Start Date: October 2000	3) End Date: N/A	4) Total Funding: N/A

5) Description of Transfer Payment Program: CIHR administers a large suite of grant programs all of which are listed in its Grants and Awards Guide and/or made available publicly on the web www.cihr.gc.ca. For each program, the website provides a description of the program, eligibility criteria, application guidelines and forms, and policies and procedures governing the use of funds.

6) Objective(s), expected result(s) and outcomes:

Objectives: Improved health, improved services and products and a strengthened health care system

Expected results:

1. world-class health research, responding to research opportunities (investigator-framed) and priorities (Institute-framed), funded to create health knowledge;
2. strong health research community able to undertake and translate outstanding research into practice, programs and policies for improved health of Canadians; and
3. a productive health system; stimulation of economic development through discovery and innovation.

Outcomes: Translation of knowledge, outstanding research, and research capacity

7) Achieved results or progress made:

Please refer to section II of this DPR (Analysis by Strategic Outcome) for detailed information on the achieved results.

	8) Actual Spending 2002-03	9) Actual Spending 2003-04	10) Planned Spending 2004-05	11) Total Authorities 2004-05	12) Actual Spending 2004-05	13) Variance(s) between 10 and 12
14) Grants for research projects and personnel support						
-Total Grants and Awards	573.8	631.4	727.2	693.6	686.5	40.7
- Total Contributions						
- Total Other Transfer Payments						

15) Total for Grants for research projects and personnel support	573.8	631.4	727.2	693.6	686.5	40.7
16) Total TPP	573.8	631.4	727.2	693.6	686.5	40.7

17) Comments on Variances:

As part of government restructuring on departmental appropriations, the CIHR has reduced its Grants allotment (vote 15) for the 2004-2005 fiscal year by $36 million pertaining to reduced anticipated expenditures for the Canada Research Chairs program. The lapsed funding in the Grants and Awards was the result of difficulties experienced by universities in filling Canada Research Chairs at the rate that had been hoped for. Factors resulting in the Operating surplus include: staff not being hired at the rate expected thereby underutilizing the salary budget, projects being cancelled or not starting as quickly as planned and efficiencies identified in the peer review process

18) Significant Evaluation Findings and URL to last evaluation:

Regional Partnership Program (RPP) - to be posted on internet in summer of 2005

Operating Grants program (OGP) - can be found at http://www.cihr-irsc.gc.ca/e/28343.html

1) Name of Transfer Payment Program: Canada Graduate Scholarships		
2) Start Date: Fiscal Year 2003/2004	3) End Date: N/A	4) Total Funding: N/A

5) Description of Transfer Payment Program:

The Canada Graduate Scholarships Program administered by CIHR is intended to provide special recognition and support to students who are pursuing a Master's or Doctoral degree in a health related field in Canada. These candidates are expected to have an exceptionally high potential for future research achievement and productivity. This program awards scholarships through national competitions by the granting agencies: NSERC, SSHRC, and CIHR. These awards are intended to sustain recipients while they pursue graduate studies.

6) Objective(s), expected result(s) and outcomes:

Objective: to help ensure a reliable supply of highly qualified personnel to meet the needs of Canada's knowledge economy.

Expected results:

1. Superior health research candidates attracted, trained and available to meet demand for highly qualified personnel in the academic, public and private sectors.
2. Appropriate investments that provide incentive for superior health research students to enroll in and complete health-related Masters and PhD programs (MRRS Draft).

Immediate outcome: An expanded pool of trained and highly capable researchers

Strategic outcome: Strong health research community able to undertake outstanding research

7) Achieved results or progress made: In 2004-2005 CIHR invested $5.2 M in the Canada Graduate Scholarships program. The Canada Graduate Scholarships Masters and Doctoral Awards continue to provide professional skills development to researchers and investigators, including trainees and young investigators. CIHR continues to support the Canada site of *Science Next Wave*, a weekly online publication that covers scientific training, career development and the science job market (see http://nextwave.sciencemag.org/ca/). It is estimated that hundreds of young researchers consult this site, based on 48,493 site visits and 147,579 page views during 2004.						
	8) Actual Spending 2002-03	9) Actual Spending 2003-04	10) Planned Spending 2004-05	11) Total Authorities 2004-05	12) Actual Spending 2004-05	13) Variance(s) between 10 and 12
14) Canada Graduate Scholarships						
-Total Grants and Awards	0	1.9	5.4	5.4	5.2	0.2
- Total Contributions						
- Total Other Transfer Payments						
15) Total Canada Graduate Scholarships	0	1.9	5.4	5.4	5.2	0.2
16) Total TPP	0	1.9	5.4	5.4	5.2	0.2
17) Comments on Variances: N/A						
18) Significant Evaluation Findings and URL to last evaluation: N/A						

1) Name of Transfer Payment Program: Institute Support Grants						
2) Start Date: October 2000	3) End Date: N/A	4) Total Funding: N/A				
5) Description of Transfer Payment Program: Health Research Institutes will assess research priorities in their area, determine gaps and opportunities that present research is not addressing, and will devote resources toward answering these questions and addressing these gaps. Payment of Institute Support Grants will be integrated into CIHR's payment systems currently in place for Research Funding Programs. These programs are paid in bi-monthly instalments and are in compliance with TB's policy on transfer payments.						
6) Objective(s), expected result(s) and outcomes:						
7) Achieved results or progress made:						
	8) Actual Spending 2002-03	9) Actual Spending 2003-04	10) Planned Spending 2004-05	11) Total Authorities 2004-05	12) Actual Spending 2004-05	13) Variance(s) between 10 and 12
14) Institute Support Grants						
-Total Grants and Awards	13.0	13.6	13.0	13.0	13.0	0
- Total Contributions						
- Total Other Transfer Payments						
15) Total Institute Support Grants	13.0	13.6	13.0	13.0	13.0	0
16) Total TPP	13.0	13.6	13.0	13.0	13.0	0
17) Comments on Variances: N/A						
18) Significant Evaluation Findings and URL to last evaluation: N/A						

Table 8: Response to Parliamentary Committees, Audits and Evaluations

In 2004-2005, CIHR made only one formal committee appearance, when the President appeared before the Standing Committee on Finance as part of the pre-budget consultations. Similarly, CIHR was not directly involved in any committee reports that required CIHR response.

CIHR would like to take this opportunity to illustrate the organization's ongoing efforts to respond to questions from Parliamentarians and to provide them with timely, accurate information.

In 2004-05, the voluntary health sector was increasingly active on the government advocacy front. Intensified efforts by various health charities (Juvenile Diabetes Research Foundation Canada or JDRF), ALS Society, Lung Association, Autism Society, Diabetes Association, etc) led to unprecedented interest by Parliamentarians who called upon the Government of Canada – and CIHR in particular – to increase their focus and funding for these particular disease areas. As a result, CIHR was asked on numerous occasions to provide information on its activities and funding amounts in specific disease areas. Institute Scientific Directors were invited to present to Senate Standing Committees (e.g. Gender and Health, Neurosciences, Mental Health and Addiction). CIHR representatives were also asked on occasion asked to attend meetings with voluntary health sector groups. In addition to providing the requested information, CIHR used these opportunities to educate Parliamentarians on CIHR, its mandate, structure and strategic plan.

Response to the Auditor General

No recommendations were received.

External Audits or Evaluations

No external audits (excluding the annual audit of CIHR's financial statements performed by the Office of the Auditor General) or evaluations were conducted in the 2004 – 2005 fiscal year.

Internal Audits or Evaluations

The **Operating Grants Program Evaluation** was completed and approved by Governing Council in March 2005. The final evaluation included several recommendations, such as maintaining the program given its centrality to Canadian health research, clearly communicating the goals of the program in the context of other new CIHR funding opportunities, and ensuring that CIHR peer review practices do not disadvantage proposals from applicants without an established CIHR track record.

A key recommendation of the report was that CIHR should develop better on-going performance measurement for the research it funds, including the development on an end-of-grant reporting tool and additional administrative data analysis. The implementation of this recommendation is in progress. Specifically, CIHR committed to implement these recommendations as part of the conditions of an approved 36.5M increase to CIHR's 2005-2006 budget. End-of-Grant reports have started to be used by granting agencies (including SSHRC, NSERC and CFI) to collect data on the outputs and immediate outcomes of funded research. CIHR is building upon the recommendation and work of these other agencies to implement an organization-wide process to collect data on the results of funded research. The data will be used to ensure that research funding is meeting organizational strategic goals and will be used within the context of period evaluations to compare outputs across programs or populations.

The Regional Partnerships Program (RPP) summative evaluation examined the extent to which the program achieved its following key objectives:

1. create partnerships with the smaller provinces by leveraging local funds;
2. promote the recruitment and retention of promising and/or excellent researchers by building on local strengths and priority interests of the institutions
3. reverse the decline in funding observed in the earlier part of the 1990s; and
4. increase the success rate of individual researchers in CIHR funding opportunities other than RPP.

Some of the evaluation findings :

- Since 1999, there has not been a noticeable change in the gap between CIHR funds and population, suggesting the program has stabilized, but not reversed, the decline in funding to these regions.
- In almost one-quarter of RPP projects, partners provided funds in excess of the CIHR contribution.
- Provincial stakeholders and researchers view the program as essential to maintaining regional health research capacity.
- The program does not appear to be a major factor in the attraction and retention of researchers
- Per capita spending data brings into question the rationale of the program.
- A high number of researchers, 72% of whom are successful in other CIHR competitions after holding an RPP grant or award, suggest it is an effective tool.

Based on the results of the evaluation, CIHR intends to renew RPP in its current form for two years, with the expectation that a renewed program design, resulting from detailed discussions with stakeholders and analysis of desired program objectives and mechanisms, will be drafted within one year.

Evaluation of the Canadian SARS Research Consortium

The Canadian SARS Research Consortium (CSRC) was created in June 2003 in order to ensure that Canada's health research community, funding agencies and industry are able to mount a rapid and responsive research effort in the face of response to SARS. The aims of the evaluation of the CSRC were to determine its overall effectiveness, efficiency and relevance, and to provide the Consortium with recommendations on how the performance

of this model can be improved.

The key evaluation finding was that the CSRC was mostly seen as a qualified success. There was wide agreement that many valuable lessons had been learned through the SARS experience and the CSRC experiment, and that these should be applied in the building of an ongoing response capacity for future emerging health threats.

Lessons learned

1. **The Canadian research community is willing and able to mobilize**, to work in partnership and collaboration across sectors and institutions, and to respond more quickly and effectively.
2. **There is a need to create a permanent national coordination entity to coordinate a rapid research response** to emerging infectious diseases. This entity should proactively develop mechanisms for both structural and facilitation issues.

For more information, please see:
http://www.cihr-irsc.gc.ca/e/documents/iii_csrc_eval_e.pdf

The following three internal audits were completed in the 2004-2005 fiscal year and approved by the CIHR Standing Committee on Performance Measurement, Evaluation, and Audit.

Travel Expenses – Staff

The focus of this audit was on staff travel expenses. The main findings were that: 1) no evidence was found of any serious irregularities; 2) the Treasury Board Travel Directives were not being consistently applied; 3) procedures used to verify and process claims were found to be weak and inconsistently applied; 4) the documentation supporting travel claims was not always adequate; and finally 5) information on travel expenses was not always accurately recorded in the General Ledger.

The organization responded quickly to the audit by taking corrective action on each observation as well as issuing new polices in areas such as Travel, Acquisition Cards and Delegation of Financial Signing Authorities, that improved overall, CIHR's internal controls and accounting procedures.

Additional information on these items could be found in the CIHR's Internal Audit Report Travel Expenses Staff, May 2004, at http://www.cihr-irsc.gc.ca/e/28087.html.

Post-Award Administration (PAA) Function for Research Personnel Awards Programs

Overall, the audit found the management of the post-award administration function to be consistent with established procedures, and that controls are in place to ensure compliance with the Treasury Board Secretariat's Policy on Transfer Payments. CIHR has adopted a number of sound management practices, including the adoption of a Tri-Agency approach to monitoring of grants and awards that contributes to the efficiency and effectiveness of PAA activities. CIHR has undergone significant change and growth since its inception in 2000 which has resulted in the adoption of roles and responsibilities and creation of semi-formal processes and procedures on an as needed basis to manage its PAA activities.

Through the course of our audit, potential opportunities for further improvement were identified as follows:
1) internal roles and responsibilities were not clearly defined for all PAA activities; 2) the criteria/risk basis for the selection of monitoring visits to universities and research institutions administering CIHR research funds were not well documented; 3) support for monitoring visit findings was not clearly referenced and findings were not consistently categorized; 4) internal reporting and analysis of issues identified through monitoring visits were not always timely; 5) reporting of monitoring visit findings to recipients was untimely; and 6) no formal mechanism existed to ensure timely follow up on issues identified through monitoring visits and other monitoring activities.

Senior Management of CIHR used the results of the audit to better define and assign Post-Award Administration roles and responsibilities. In addition, more appropriate staff training of PAA functions and the development and implementation of systems/tools to log and respond to queries has been put into place. CIHR is also working to better identify and document PAA processes and procedures. Finally, the development of high-level criteria, procedures and standards will take place with CIHR's sister agencies NSERC/SSHRC, as part of a planned review of the Tri-Agency Monitoring Program policies and practices.

Additional information on Post-Award Administration and monitoring, as well as on the Tri-Agency Monitoring Program can be found in the following sources:

- the Risk-Based Audit Framework of the Networks of Centres of Excellence Program (NCE), at http://www.nce.gc.ca/pubs/reports/2002/rbaf/rbaf092002_e.pdf; and
- the RMAF/RBAF for the Grants Program to Canadian Post-Secondary Institutions to Defray a Portion of the Indirect Costs of Federally Supported Research at Colleges, Universities and their Affiliated Research Hospitals and Institutes, at http://www.indirectcosts.gc.ca/rmaf_rbaf_e.pdf.

Hospitality Expenses

CIHR's Financial Policy for Extending Hospitality is based on the policy of the Treasury Board of Canada. CIHR has also developed and promulgated CIHR-wide Hospitality Principles, Hospitality FAQs and Procedures for Pre-approval. Audit observations were as follows: 1) the CIHR Financial Policy for Extending Hospitality was not always clear and procedures in place used to verify and process claims were inconsistently applied; 2) supporting documentation for hospitality claims was not always adequate and in line with the established procedures; and 3) hospitality expenses for the President, Executive Vice-President and one Vice-President were not accurately published on the CIHR website.

In response to this audit, CIHR has made modifications to the Financial Policy for Extending Hospitality to ensure it includes more relevant details. As well, more appropriate methods to ensure adequate recording of hospitality expenses have been adopted. A process for monitoring and recording non-compliance to allow for additional training and follow-up as required has been established, as well as detailed procedures for recording, filing, reconciling and publishing Executives' expenses on CIHR's website.
Additional information on non-compliance can be found on the CIHR' s website with the 2005-2006 CIHR Grants and Awards Guide, section 5-B2, at http://www.cihr-irsc.gc.ca/e/22634.html

Auditor General of Canada
Vérificatrice générale du Canada

AUDITOR'S REPORT

To the Canadian Institutes of Health Research
and the Minister of Health

I have audited the statement of financial position of the Canadian Institutes of Health Research (CIHR) as at March 31, 2005 and the statements of operations and net assets and cash flow for the year then ended. These financial statements are the responsibility of CIHR's management. My responsibility is to express an opinion on these financial statements based on my audit.

I conducted my audit in accordance with Canadian generally accepted auditing standards. Those standards require that I plan and perform an audit to obtain reasonable assurance whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation.

In my opinion, these financial statements present fairly, in all material respects, the financial position of CIHR as at March 31, 2005 and the results of its operations and its cash flows for the year then ended in accordance with Canadian generally accepted accounting principles.

Sheila Fraser

Sheila Fraser, FCA
Auditor General of Canada

Ottawa, Canada
May 27, 2005

Canadian Institutes of Health Research
MANAGEMENT RESPONSIBILITY
FOR FINANCIAL STATEMENTS

Responsibility for the integrity and objectivity of the accompanying financial statements of the Canadian Institutes of Health Research for the year ended March 31, 2005 and all information contained in this report rests with CIHR's management.

These financial statements have been prepared in accordance with Canadian generally accepted accounting principles for the public sector. Where appropriate, the financial statements include amounts that have been estimated according to management's best judgement. These statements should be read within the context of the significant accounting policies set out in Note 2 of the financial statements.

To fulfil these accounting and reporting responsibilities, CIHR maintains a set of accounts which provides a centralized record of CIHR's financial transactions. Financial information contained in the ministerial statements and elsewhere in the *Public Accounts of Canada* is consistent with these financial statements.

Management has developed and maintains books of accounts, records, financial and management controls and practices, and information systems. They are designed to provide reasonable assurance that CIHR's assets are safeguarded and controlled, that resources are managed economically and efficiently in the attainment of corporate objectives, and that transactions are in accordance with the *Financial Administration Act* and regulations as well as CIHR policies and statutory requirements. Financial management and internal control systems are augmented by the maintenance of internal audit programs. Management also seeks to assure the objectivity and integrity of the information in the financial statements by the careful selection, training and development of qualified staff, by organizational arrangements that provide adequate divisions of responsibility and by communications programs aimed at ensuring regulations, policies, standards and managerial authorities are understood throughout the organization.

The transactions and financial statements of CIHR have been audited by the Auditor General of Canada, the independent auditor for the Government of Canada.

Approved by:

John Klimczak
Director, Finance & Administration

Guy D'Aloisio, CMA
Vice-President, Services & Operations

May 27, 2005

Canadian Institutes of Health Research
STATEMENT OF FINANCIAL POSITION
AS AT MARCH 31
(in thousands of dollars)

	2005	2004
ASSETS		
Financial Assets		
Due from the Consolidated Revenue Fund	12,417	7,185
Accounts receivable:		
Other Government departments	648	344
External parties	195	213
Advances	192	168
Total financial assets	**13,452**	**7,910**
Non-financial assets		
Prepaid expenses	200	550
Capital assets (Note 3)	3,948	3,396
Total non-financial assets	**4,148**	**3,946**
TOTAL ASSETS	**17,600**	**11,856**
LIABILITIES		
Accounts payables and accrued liabilities		
Other Government departments	378	290
External parties	2,940	5,192
Employee vacation and compensatory benefits liability	1,084	788
Deferred revenue (Note 4)	9,099	1,703
Employee severance benefits liability (Note 10)	3,826	3,154
TOTAL LIABILITIES	**17,327**	**11,127**
NET ASSETS (Note 5)	**273**	**729**
TOTAL LIABILITIES AND NET ASSETS	**17,600**	**11,856**

Contingencies (Note 6)
Commitments (Note 7)

The accompanying notes are an integral part of these financial statements.

Approved by Governing Council:

Dr. Alan Bernstein, O.C., FRSC
Chair

Approved by Management:

Guy D'Aloisio, CMA
Vice-President, Services & Operations

Canadian Institutes of Health Research
STATEMENT OF OPERATIONS AND NET ASSETS
FOR THE YEAR ENDED MARCH 31
(in thousands of dollars)

	2005	2004
REVENUES		
Donations for health research (Note 4)	5,595	5,730
Endowments for health research (Note 4)	3	8
Other	10	2
TOTAL REVENUES	**5,608**	**5,740**
EXPENSES		
Grants and awards		
Open competitions	448,391	426,042
Strategic initiatives	154,256	133,745
Institute support grants	13,000	13,578
Knowledge translation	3,439	2,222
Canada research chairs	60,603	46,268
Networks of centres of excellence	25,000	25,000
Donations for health research (Note 4)	5,595	5,730
Endowments for health research (Note 4)	3	8
	710,287	652,593
Less: Refunds of previous years' expenses	(3,377)	(2,797)
Total grants and awards	706,910	649,796
Operations and administration		
Salaries and employee benefits	27,499	23,470
Professional and special services	10,098	7,623
Travel	3,087	4,135
Accommodation	2,351	873
Furniture, equipment and software	1,476	1,940
Amortization	1,426	1,064
Information services - communications	1,351	1,370
Other expenses	301	794
Total operations and administration	47,589	41,269
TOTAL EXPENSES	**754,499**	**691,065**
NET COST OF OPERATIONS	**748,891**	**685,325**
NET ASSETS, BEGINNINING OF THE YEAR	**729**	**335**
Net cash provided by Government	739,093	680,968
Change in due from Consolidated Revenue Fund	5,232	2,424
Services provided without charge by other Government departments (Note 8)	4,110	2,327
NET ASSETS, END OF THE YEAR (Note 5)	**273**	**729**

The accompanying notes are an integral part of these financial statements.

Canadian Institutes of Health Research
STATEMENT OF CASH FLOW
FOR THE YEAR ENDED MARCH 31
(in thousands of dollars)

	2005	2004
OPERATING ACTIVITIES		
Net cost of operations	748,891	685,325
Non-cash items included in net results		
Amortization of capital assets	(1,426)	(1,064)
Services provided without charge by other Government departments	(4,110)	(2,327)
	(5,536)	(3,391)
Increase (decrease) in non-cash working capital items		
Accounts receivable	286	175
Prepaid expenses	(350)	381
Accounts payable and accrued liabilities	2,164	(1,654)
Employee vacation and compensatory benefits liability	(296)	(87)
Deferred revenue	(7,396)	(770)
Employee severance benefits liability	(672)	(504)
	(6,264)	(2,459)
Cash Used in Operating Activities	**737,091**	**679,475**
INVESTING ACTIVITIES		
Acquisitions of capital assets	1,978	1,491
Increase in advances	24	2
Cash Used in Investing Activities	**2,002**	**1,493**
NET CASH PROVIDED BY GOVERNMENT	**739,093**	**680,968**

The accompanying notes are an integral part of these financial statements.

1. Authority and Objectives

The Canadian Institutes of Health Research (CIHR) was established in June 2000 under the *Canadian Institutes of Health Research Act*, replacing the former Medical Research Council of Canada. It is listed in Schedule II to the *Financial Administration Act* as a departmental corporation. CIHR's objective is to excel, according to international standards of scientific excellence, in the creation of new knowledge, and its translation into improved health, more effective health services and products, and a strengthened Canadian health care system.

CIHR is led by a President who is the Chairperson of a Governing Council of not more than nineteen other members appointed by the Governor in Council. The Governing Council sets overall strategic direction, goals and policies and oversees programming, resource allocation, ethics, finances, planning and accountability.

CIHR has 13 Institutes that focus on identifying the research needs and priorities for specific health areas, or for specific populations, then developing strategic initiatives to address those needs. Each Institute is led by a Scientific Director who is guided by an Institute Advisory Board, which strives to include representation of the public, researcher communities, research funders, health professionals, health policy specialists and other users of research results.

CIHR's grants, awards, and operating expenditures are funded by budgetary lapsing authorities. Employee benefits are funded by statutory authorities.

2. Significant Accounting Policies

These financial statements have been prepared in accordance with Canadian generally accepted accounting principles for the public sector. The most significant accounting policies are as follows:

(a) Parliamentary appropriations - CIHR is financed by the Government of Canada through Parliamentary appropriations. Appropriations provided to CIHR do not parallel financial reporting according to generally accepted accounting principles. They are based in large part on cash flow requirements. Consequently, items recognized in the statement of operations and net assets and the statement of financial position are not necessarily the same as those provided through appropriations from Parliament. Note 9 provides a high-level reconciliation between the two bases of reporting.

(b) Net cash provided by government - is the difference between all cash receipts and all cash disbursements including transactions between departments.

(c) Due from the Consolidated Revenue Fund - all departments including agencies and departmental corporations operate within the Consolidated Revenue Fund (CRF). The CRF is administered by the Receiver General for Canada. All cash receipts are deposited to the CRF and all cash disbursements made by departments are paid from the CRF. Due from the CRF represents the amount of cash that CIHR is entitled to draw from the Consolidated Revenue Fund without further appropriations, in order to discharge its liabilities.

(d) Revenues - these are accounted for in the period in which the underlying transaction or event occurred that gave rise to the revenues.

(e) Deferred revenue - monies received as donations from various organizations and individuals for health research as well as interest on endowments are recorded as deferred revenue until such time that they are disbursed in accordance with agreements between the contributor and CIHR or in accordance with the terms of the endowments.

(f) Expenses - these are recorded when the underlying transaction or expense occurred as follows:

- Grants and awards are recognized in the year in which the entitlement has been established, when the recipient has met the eligibility criteria, the commitment has been approved and the payment is due before the end of the fiscal year.

- Employee severance benefits are accrued as earned and are calculated using information derived from the results of the actuarially determined liability for employee severance benefits for the Government as a whole. Employee severance benefits on cessation of employment represent obligations of CIHR that are normally funded by appropriation when the benefits are paid.

- Employee vacation pay and compensatory benefits are expensed in the year that the entitlement occurs.

- Contributions to superannuation plans are recognized in the period that the contributions are made. Actuarial surpluses or deficiencies are not recorded in CIHR's accounts but are recognized in the consolidated financial statements of the Government of Canada.

- Services provided without charge by other government departments and agencies are recorded as operations and administration expenses at their estimated cost.

(g) Accounts receivable - these are stated at amounts expected to be ultimately realized. A provision for doubtful accounts is made for any amounts where recovery is considered uncertain.

(h) Capital assets - all tangible assets having an individual initial cost of $5,000 or more are recorded at their acquisition cost. Amortization of capital assets is done on a straight-line basis over the estimated useful life of the capital asset as follows:

Asset	Useful life
Informatics hardware	3-5 years
Informatics software	3 years
Office equipment	10 years
Motor vehicles	5 years

Amounts included in work-in-progress are uncompleted capital projects which are transferred to informatics software upon completion, and are then amortized according to CIHR's policy.

(i) Pension benefits - all eligible employees participate in the Public Service Pension Plan administered by the Government of Canada. CIHR's contributions reflect the full cost as employer. This amount is currently based on a multiple of an employee's required contributions and may change over time depending on the experience of the Plan. CIHR's contributions are expensed during the year in which the services are rendered and represent the total pension obligation of the Corporation. CIHR is not currently required to make contributions with respect to any actuarial deficiencies of the Public Service Pension Plan.

(j) Refunds of previous years' expenses - these relate to grants and awards which have been cancelled in subsequent years and are recorded as a reduction in expenses. These funds are remitted to the Receiver General for Canada.

(k) Measurement uncertainty - the preparation of financial statements in accordance with Canadian generally accepted accounting principles requires management to make estimates and assumptions that affect the reported amounts of assets, liabilities, revenues and expenses reported in the financial statements. At the time of preparation of these statements, management believes the estimates and assumptions to be reasonable. The most significant items where estimates are used are the employee vacation and compensatory benefits liability, employee severance benefits liability and amortization of capital assets.

3. Capital Assets

Capital asset class (in thousands of dollars)	2005 * Opening Balance	Additions / (Transfers) for the Year	Accumulated Amortization	Net Book Value	2004 Net Book Value
Informatics hardware	1,614	44	995	663	953
Informatics software	3,389	1,843	2,282	2,950	2,166
Office equipment	238	107	54	291	214
Motor vehicle	23	-	17	6	9
Work-in-progress	54	(16)	-	38	54
Total	**5,318**	**1,978**	**3,348**	**3,948**	**3,396**

Amortization expense for the year ended March 31, 2005 is $ 1,426,000 (2004 - $1,064,000).

4. Deferred Revenue

Included in deferred revenue are donations from various organizations and individuals for health research as well as interest on endowments. The transactions relating to these accounts are as follows:

	2005	2004
	(in thousands of dollars)	
Donations for health research		
Balance, beginning of the year	1,700	926
Add:		
Donations received	12,833	6,420
Interest earned	159	84
Less:		
Grants expensed	5,595	5,730
Balance, end of the year	**9,097**	**1,700**
Interest on endowments for health research		
Balance, beginning of the year	3	7
Add:		
Interest earned	2	4
Less:		
Grants expensed	3	8
Balance, end of the year	**2**	**3**
Total Deferred Revenue	**9,099**	**1,703**

5. Net Assets

Included in Net Assets are two endowments for health research. These endowments are restricted assets that cannot be spent. The interest on these accounts is credited to deferred revenue.

	2005	2004
	(in thousands of dollars)	
Endowments for health research	140	140
Unrestricted net assets	133	589
Net Assets	**273**	**729**

6. Contingencies

A legal suit for employment equity was initiated by the Public Service Alliance of Canada against Her Majesty the Queen naming certain separate employer organizations of the Government of Canada, including the Canadian Institutes of Health Research (CIHR), as defendants. The amount of this claim, as it relates to CIHR, is estimated to be $750,000. In management's opinion, the outcome of this litigation is not presently determinable.

One other legal suit launched by an individual alleging damage from participation in projects funded by grants from the Medical Research Council of Canada is pending. The amount of this claim is estimated at $ 25,000. In management's opinion, the outcome of this litigation is not presently determinable.

7. Commitments

CIHR is committed to disburse grants and awards in future years subject to the appropriation of funds by Parliament. Future year commitments are as follows.

Years ended March 31,	(in thousands of dollars)
2006	663,613
2007	492,860
2008	323,897
2009	167,441
2010	68,950
2011-2013	21,699
Total Grants and Awards Commitments	**1,738,460**

In addition, the nature of CIHR's operating activities result in some multi-year contracts whereby CIHR will be committed to make some future payments when the goods or services are rendered. Operating commitments that can be reasonably estimated are as follows:

Years ended March 31,	(in thousands of dollars)
2006	2,306
2007	753
2008	648
2009	75
2010	75
Total Operating Commitments	**3,857**

8. Services provided without charge by other Government departments

CIHR is related in terms of common ownership to all Government of Canada departments, agencies, and Crown Corporations. CIHR enters into transactions with these entities in the normal course of business and on normal trade terms applicable to all individuals and enterprises except that certain services, as shown below, are provided without charge.

	2005	2004
	(in thousands of dollars)	
Accommodation services provided by Public Works and Government Services Canada	2,351	873
Contributions covering employer's share of employees' insurance premiums and costs paid by Treasury Board Secretariat	1,699	1,394
Audit services provided by the Office of the Auditor General of Canada	60	60
Total Services Provided Without Charge	**4,110**	**2,327**

9. Parliamentary Appropriations

(a) Reconciliation of net cost of operations to total Parliamentary appropriations used

	2005	2004
	(in thousands of dollars)	
Net cost of operations	**748,891**	**685,325**
Adjustments for items not affecting appropriations		
Less: Items recorded as expenses but not affecting appropriations		
Change in vacation pay and compensatory benefits	296	87
Change in employee severance benefits	672	504
Grants funded from donations	5,595	5,730
Grants funded from endowments	3	8
Refunds of previous years' expenses – grants and awards	(3,377)	(2,797)
Refunds of previous years' expenses – operating	(69)	-
Amortization	1,426	1,064
Services provided without charge	4,110	2,327
Adjustments of previous year's payables	(496)	(224)
Other	(5)	19
	8,155	6,718
Add: Items recorded as revenue but not affecting appropriations		
Donations for health research	5,595	5,730
Endowments for health research	3	8
Other	10	2
	5,608	5,740
Adjustments for items affecting appropriations		
Add: Acquisitions of capital assets	1,978	1,491
Change in prepaid expenses	(350)	381
	1,628	1,872
Total Parliamentary appropriations used	**747,972**	**686,219**

(b) Reconciliation of Parliamentary appropriations voted to total Parliamentary appropriations used

	2005	2004
	(in thousands of dollars)	
Parliamentary appropriations voted:		
Vote 10 – Operating expenditures	36,162	32,106
Supplementary Vote 10a	5,588	7,837
Supplementary Vote 10b	-	1,109
Transfer from Treasury Board Vote 10	-	1,185
Transfer from Treasury Board Vote 15	125	-
Transfer from Vote 15	295	-
Transfer to Vote 15	(140)	-
	42,030	42,237
Less: Lapsed appropriation	(2,601)	(5,987)
	39,429	36,250
Vote 15 – Grants	711,274	633,896
Supplementary Vote 15a	-	48,650
Supplementary Vote 15b	914	1,000
Transfer to Vote 10	(295)	-
Transfer from Vote 10	140	-
	712,033	683,546
Less: Lapsed appropriation	(7,344)	(4,691)
Lapse as a result of expenditure reduction	-	(32,000)
Total lapsed appropriation - Vote 15	(7,344)	(36,691)
	704,689	646,855
Statutory contributions to employee benefit plans	3,854	3,114
Total Parliamentary appropriations used	**747,972**	**686,219**

The majority of the lapse in Vote 15 - Grants ($ 7.0 Million) is attributable to the Canada Research Chairs (CRC) Program. The lapse in funds does not have an impact on CIHR's capacity to fund CRCs in subsequent years.

(c) Reconciliation of net cash provided by Government to Parliamentary appropriations used

	2005	2004
	(in thousands of dollars)	
Net cash provided by Government	739,093	679,982
Refunds of previous years' expenses	3,377	2,797
Change in accounts receivable	(286)	(175)
Change in advances	(24)	(2)
Change in accounts payable and accrued liabilities	(2,164)	1,654
Change in deferred revenue	7,396	770
Other adjustments	580	1,193
Total Parliamentary appropriations used	**747,972**	**686,219**

10. Employee future benefits

Employees of CIHR are entitled to specific benefits on or after termination or retirement, as provided for under various collective agreements or conditions of employment.

(a) Pension benefits

CIHR and all eligible employees contribute to the Public Service Pension Plan. This pension plan provides benefits based on years of service and average earnings at retirement. The benefits are fully indexed to the increase in the Consumer Price Index. CIHR's and employees' contributions to the Public Service Pension Plan for the year were as follows:

	2005	2004
	(thousands of dollars)	
CIHR's contributions	3,141	2,803
Employees' contributions	1,026	810
	4,167	**3,613**

(b) Severance benefits

CIHR provides severance benefits to its employees. This benefit plan is not pre-funded and therefore has no assets, resulting in a plan deficit equal to the employee severance benefits liability. Information about the plan is as follows:

	2005	2004
	(thousands of dollars)	
Employee severance benefits liability, beginning of the year	3,154	2,650
Expense for the year	792	567
Benefits paid during the year	(120)	(63)
Employee severance benefits liability, end of the year	**3,826**	**3,154**

11. Financial Instruments

The fair values of financial assets and liabilities approximate the carrying amounts of these instruments due to the short period to maturity.

12. Comparative Figures

Certain comparative figures have been reclassified to conform to the presentation adopted in the current year.