

**CANADIAN INSTITUTES OF HEALTH
RESEARCH**

2008-09

DEPARTMENTAL PERFORMANCE REPORT

LEONA AGLUKKAQ
MINISTER OF HEALTH



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MINISTER'S MESSAGE

I am very pleased to present the 2008-2009 Departmental Performance Report (DPR) for the Canadian Institutes of Health Research (CIHR).

The Government of Canada is pursuing a multi-year strategy to promote a better quality of life in Canada through science and technology while creating jobs and economic growth.

CIHR has been a valuable partner in this Government's science and technology strategy. Through health research and partnerships across the country, the organization has promoted the health and well being of Canadians by improving the effectiveness and efficiency of the health care system.



Over the last year the CIHR has established a research consortium to advance cancer stem cell research and funded important research into obesity, diabetes, cardiovascular disease, mental health and improving the health of children suffering from asthma and allergies. It has also participated in international research with the United States on cancer and with France on Alzheimer's disease.

The funding of 134 new Canada Research Chairs over the past year at universities across the country has enhanced Canada's international science reputation and its ability to attract the brightest minds from around the globe. The significant support provided for the chairs and their research programs is expected to support well over 500 Canadian and international doctoral students each year.

Through its partnerships with industry, the CIHR has continued to facilitate the commercial application of researchers' findings. Through its innovative knowledge translation programs, CIHR is bringing researchers, clinicians and policy makers together to translate research results into improved treatments and health services.

Through its continued work as leader of the Pandemic Preparedness Strategic Research Initiative (PPSRI), the CIHR has continued to support influenza and pandemic preparedness research in Canada. This initiative, which includes research projects ranging from vaccine development to virus tracking, has helped Canada prepare for the emergence of new infectious diseases, including H1N1 influenza.

This past year, CIHR also partnered with Health Canada to develop the Drug Safety and Effectiveness Network (DSEN), a national research network that will help assess the risks and benefits of medications currently on the market.

These and other initiatives demonstrate both CIHR's commitment to and effectiveness in promoting excellence in health research; research that will continue to improve the lives of Canadians for generations to come.

Leona Aglukkaq
Minister of Health
Government of Canada

SECTION I: DEPARTMENTAL OVERVIEW

Raison d'être & Responsibilities

[CIHR](#) is the Government of Canada's premier health research funding agency. It was created in June 2000 by the *CIHR Act* with a 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".

CIHR responds to the evolving needs of health research by:

- supporting outstanding research, both investigator-driven and strategic (i.e. targeted on priority areas), across the full spectrum of health research;
- building research capacity by supporting researchers in under-developed areas and training the next generation of health researchers; and
- promoting knowledge translation, so that the results of research are transformed into relevant applications (policies, practices, procedures, products and services), that have health and economic benefits.

CIHR has created [13 institutes](#). These institutes are not "bricks-and-mortar" buildings but communities of experts. In its topic area, each of CIHR's 13 Institutes supports a broad spectrum of research: biomedical, clinical, health services and systems, and population and public health. Institutes form national research networks linking researchers, funders and knowledge users across Canada to work on priority areas. This innovative structure has been hailed as a global best practice and supports a problem-based, multidisciplinary and collaborative approach to health research.

CIHR is governed by a Governing Council of 20 members. The President of CIHR serves as its Chair, while the Deputy Minister of Health is an *ex-officio* and non-voting member. CIHR reports to Parliament through the [Minister of Health](#) and, as such, plays a key role in the Health Portfolio.

CIHR works closely with [Natural Sciences and Engineering Research Council \(NSERC\)](#) and [Social Sciences and Humanities Research Council \(SSHRC\)](#),

CIHR Quick facts: 2008-2009

President: [Dr. Alain Beaudet](#), MD, PhD

Annual Spending: \$969.4 Million

Head Office: Ottawa

Employees: 403

Institutes: 13

Aboriginal Peoples' Health: [Dr. Malcolm King](#)

Aging: [Dr. Anne Martin-Matthews](#)

Cancer Research: [Dr. Morag Park](#)

Circulatory and Respiratory Health: [Dr. Peter Liu](#)

Gender and Health: [Dr. Joy Johnson](#)

Genetics: [Dr. Roderick McInnes](#)

Health Services and Policy Research:
[Dr. Colleen M. Flood](#)

Human Development, Child and Youth Health:
[Dr. Michael Kramer](#)

Infection and Immunity: [Dr. Bhagirath Singh](#)

Musculoskeletal Health and Arthritis:
[Dr. Jane Aubin](#)

Neurosciences, Mental Health and Addiction:
[Dr. Anthony Phillips](#)

Nutrition, Metabolism and Diabetes:
[Dr. Philip M. Sherman](#)

Population and Public Health:
[Dr. Nancy Edwards](#)

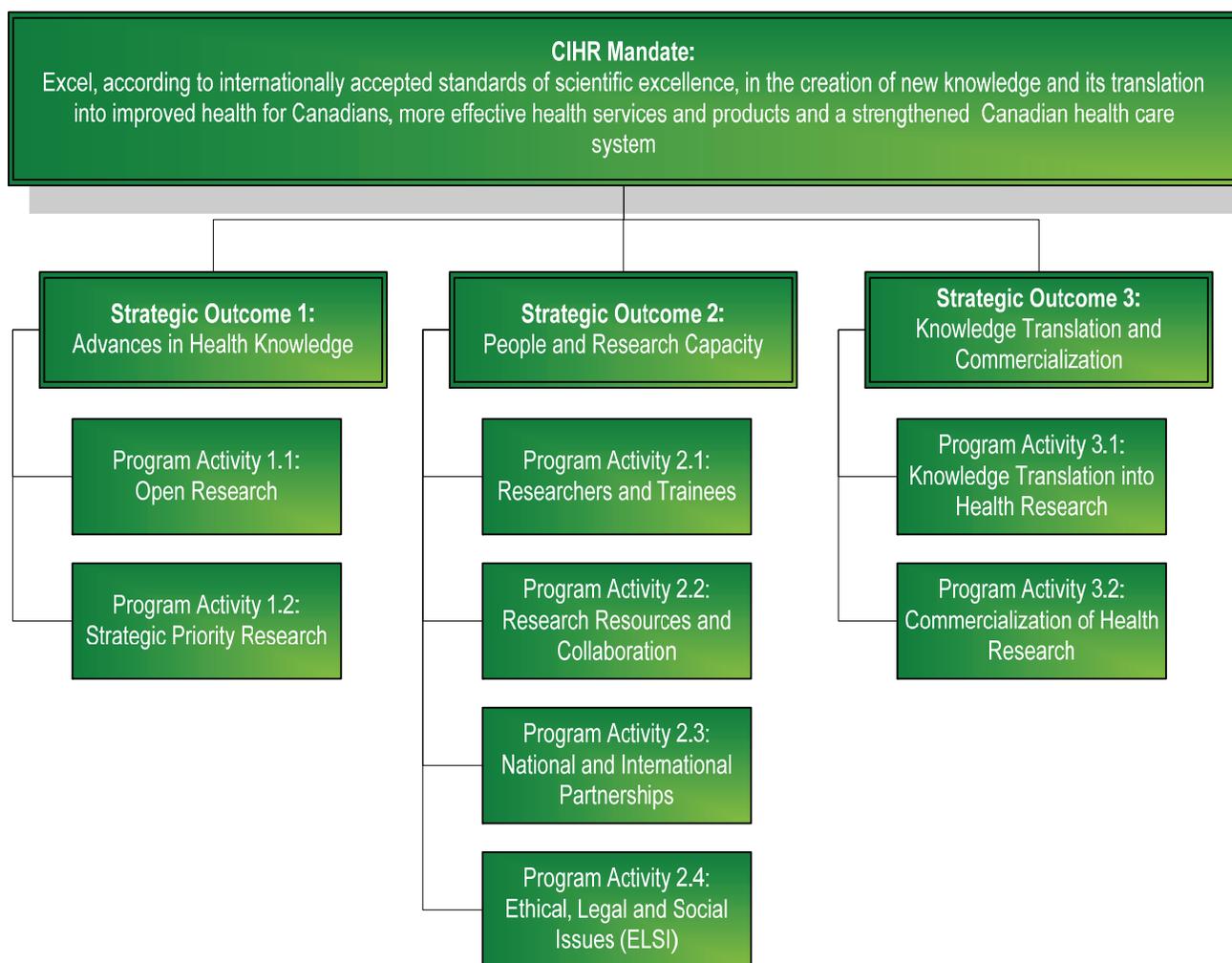
CIHR supports the work of over 13,000 health researchers and trainees

the two Granting Councils of the Industry portfolio, to share information and co-ordinate efforts. The three Councils collectively manage several flagship programs for the Government of Canada, including the Networks of Centres of Excellence Program, the Canada Graduate Scholarships Program and the Canada Research Chairs Program.

In 2008-09, CIHR continued to support the Government of Canada's [Science & Technology Strategy](#). CIHR's focus on excellence and innovation helps ensure that its investments are aligned to the Strategy's key theme of mobilizing S&T to Canada's advantage.

Program Activity Architecture (PAA) and Strategic Outcomes

The chart below illustrates CIHR's new Program Activity Architecture (PAA) which came into effect in 2008-09. It has three Strategic Outcomes divided into eight major Program Activities and 19 Sub-Program Activities.



To accomplish its mandate, CIHR provides a range of programs and activities that are designed to support outstanding research, to build health research capacity, and to promote knowledge translation. The following three strategic outcomes will help position Canada as a world leader in the creation and use of health knowledge for the betterment of Canadians and people across the globe. CIHR's strategic outcomes are as follows:

1. **Advances in Health Knowledge:** Canadian health research advances health knowledge and is responsive to current opportunities and priorities.
2. **People and Research Capacity:** A strong and talented health research community with the capacity to undertake health research.
3. **Knowledge Translation and Commercialization:** Health research is translated and adopted into practice, programs and policies that contribute to more effective health services and products, a strengthened health care system, and the improved health of Canadians.

Performance Summary

2008–09 Financial Resources (in millions of dollars)

Strategic Outcomes	Planned Spending	Total Authorities	Actual Spending
1.0 Advances in Health Knowledge	\$ 585.2	\$ 618.1	\$ 625.5
2.0 People and Research Capacity	\$ 275.1	\$ 278.6	\$ 273.9
3.0 Knowledge Translation and Commercialization	\$ 68.3	\$ 77.3	\$ 70.0
TOTAL	\$ 928.6	\$ 974.0	\$ 969.4

Total Authorities:

During 2008-09, CIHR's total authorities increased by \$45.4M due primarily to a \$34M base budget increase announced in the 2008 Federal Budget. In addition, funding for the launch of several new key programs was provided: \$4.4M for the Centres of Excellence for Commercialization and Research (CECR) Program (offset by a reduction of \$1.4M for the Networks of Centres of Excellence Program), \$1.7M for grants through the new Business-Led Networks of Centres of Excellence (BL-NCE) Program, \$0.3M to launch the Vanier-Canada Graduate Scholarship (Vanier-CGS) Program and \$0.3M for the Canada Foreign Study Supplement Program. CIHR also received net transfers from other federal government departments during the 2008-09 fiscal year totaling \$1.8M to fund additional health research projects in key areas including Hepatitis C, the prevention of suicide for aboriginal people, and pandemic preparedness research. Various other administrative type authority increases totaled \$4.3M for items such as collective agreement increases and operating budget carry forward.

Actual Spending:

In 2008-09, CIHR's total expenditures were \$969.4M which was \$4.6M less than total authorities. CIHR lapsed only \$0.8M of its Grants Vote during the 2008-09 fiscal year due to careful resource planning and management. A lapse of \$3.8M occurred in CIHR's Operating Expenditures Vote due to some authorities being granted to CIHR late in the fiscal year, as well as improvements in operational efficiencies and fewer FTEs being hired than originally planned.

2008–09 Human Resources (FTEs)

Planned	Actual	Difference
458	403	55

As noted above, CIHR lapsed \$3.8M in its Vote 20 (Operating Expenses), due in part to fewer FTE's being hired than originally planned. During 2008-09, CIHR reviewed all of its approved positions to ensure its operations were as efficient as possible. As a result, CIHR reduced its planned FTE's to 410 in its 2009-10 Report on Plans and Priorities.

CIHR also relies on the services of over 2,200 researchers who provide their time each year, without remuneration, to serve on peer review panels that review over 6,000 applications annually.

Strategic Outcome # 1: Advances in Health Knowledge. Canadian health research advances health knowledge and is responsive to current opportunities and priorities

Performance Indicator	Target
1. Canadian ranking in health research expenditures compared to international levels.	Maintain or increase international ranking in health research expenditures.
2. Changes in health practices, programs or policies and improvements in service delivery or health informed by CIHR-funded research.	Evidence of changes in health practices, programs, policies, health service delivery, or health due to the work of CIHR funded researchers.
3. Number of publications resulting from CIHR-funded research.	Maintain or increase international ranking in health research publications.

2008-09 Performance

- According to the most recent data, Canada, at 8.6%, ranked among the top five out of the 29 [OECD countries](#) studied in terms of health related research and development in government budgets as a percentage of the Gross Domestic Product (GDP).
- Reports from the Institutes and other sources show that CIHR-funded research has had a positive impact on health practices, programs, policies and health service delivery. This is consistent with the findings of a 2006 study by the Council of Canadian Academies which found that Canada is strong in the health and life sciences, relative to other countries, in a number of areas that coincide with CIHR's priorities. For example:
 - In 2008-09, CIHR brought together private, non-governmental, voluntary and government organizations to further research and apply findings to improve the quality of life of older individuals living with [cognitive impairment](#). CIHR's work has led other organizations to increase their research in this area.
 - The [Canadian Lifelong Health Initiative](#) (CLHI) is a groundbreaking set of large cohort studies targeting birth, chronic disease and aging. It will track the health of thousands of Canadians over many years and generate new knowledge of how environmental, social, life-style, genetic and behavioural factors affect health across the lifespan.
 - Quality of care toward and at the end of life will soon become one of the most important health care issues facing this country. The need for informed decision making by clinical practitioners and policy makers will become critical. CIHR-funded research on overcoming barriers to communication through the use of a Palliative Performance Scale (PPS) has contributed to the growing evidence base needed to support the policy and practice of [palliative care](#) in Canada.
- Canada ranked 10th in relation to international [medical research publications](#) per billion dollars of Gross Domestic Product (GDP). The Canadian share has been steadily rising since 2000, to reach 5% of the world's total in 2007, the most recent year for which data is available. Canada also ranks in the top ten of OECD countries in terms of the distribution of scientific articles by the field of health research as a percentage of total scientific articles. [Canada's average relative citation \(ARC\) factor](#) in medical research for 2007 was 1.34, well above the global average of 1.0. As a result Canada ranks 7th world-wide, a significant improvement from its rank of 13th in 2002.

Financial Summary: Strategic Outcome #1 (in millions of dollars)

Program Activity	2007-08 Actual Spending	2008-09				Alignment to Government of Canada Outcomes
		Main Estimates	Planned Spending	Total Authorities	Actual Spending	
1.1. Open Research	\$ 426.4	\$ 462.6	\$ 462.6	\$ 470.9	\$ 493.9	An Innovative and Knowledge-Based Economy
1.2. Strategic Priority Research	\$ 113.1	\$ 122.6	\$ 122.6	\$ 147.2	\$ 131.6	
Total	\$ 539.5	\$ 585.2	\$ 585.2	\$ 618.1	\$ 625.5	

Change in Spending:

Actual spending increased by \$86.0M over the prior fiscal year. CIHR's spending on its largest program, the Open Operating Grants Program (OOGP), increased by \$28.7M due to increased application pressure and the increased costs of conducting research. Expenditures also increased in several other priority areas including \$10.6M for clinical research, \$3.7M for pandemic preparedness, \$2.5M for regenerative medicine, \$1.9M for HIV/AIDS research, \$0.9M for global health and \$0.8M for Fabry's Disease. In addition, CIHR's 13 Institutes invested an additional \$18.7M in strategic priority operating grants.

Total Authorities:

CIHR's total authorities increased by \$32.9M during 2008-09. Of this increase, \$30.9M related to the base budget increase from the 2008 Federal Budget. CIHR also received an additional \$2.0M in authorities via transfers from other government departments to fund additional grants in key strategic priority areas of health research (including Hepatitis C research and pandemic preparedness research).

Actual Spending:

Actual spending associated with this Strategic Outcome was \$7.4M higher than total authorities as a result of the reallocation of funds from the other two Strategic Outcomes. More specifically, measures were undertaken to ensure that the target of a minimum of 800 high quality grants under the Open Operating Grant Program would be met. This program is critical as it is the foundation on which a strong and diverse research enterprise is built.

Strategic Outcome # 2: People and Research Capacity. A strong and talented health research community with the capacity to undertake health research	
Performance Indicator	Target
1. Number and types of PhD graduates in health research or related domains in Canada by year.	Maintain or increase international ranking.
2. Average time to completion of degrees compared to general population.	Maintain or accelerate time to degree for CIHR award holders.
3. Number and types of investigators funded.	Maintain number and diversity (by Institute) of investigators funded.
2008-09 Performance	
1. The number of PhD graduates in Canada is increasing slowly, as is the number of graduates per capita which has increased from 42 per 100,000 population (aged 20-39) to 48 per 100,000 in six years. However, Canada's international ranking in the number of graduated PhD students compared to other OECD countries was next to last in both 1998 and 2006, the only years for which CIHR has data.	

2. According to the preliminary results of the recent evaluation of the Canada Graduate Scholarships (CGS) Program, Master's students supported through CGS took slightly less time to obtain their degree while Doctoral students supported through CGS took the same time to obtain their degree as students funded from other sources.
3. The number and [diversity of investigators funded by CIHR](#) has increased in all research sectors, at all the Institutes and for many different types of research.

Financial Summary: Strategic Outcome #2 (in millions of dollars)

Program Activity	2007-08 Actual Spending	2008-09				Alignment to Government of Canada Outcomes
		Main Estimates	Planned Spending	Total Authorities	Actual Spending	
2.1 Researchers and Trainees	\$ 202.3	\$ 196.1	\$ 196.1	\$ 198.2	\$ 188.9	An Innovative and Knowledge-Based Economy
2.2 Research Resources and Collaboration	\$ 68.0	\$ 50.9	\$ 50.9	\$ 52.0	\$ 58.9	Healthy Canadians
2.3 National and International Partnerships	\$ 24.0	\$ 25.2	\$ 25.2	\$ 25.4	\$ 23.7	
2.4 Ethical, Legal and Social Issues (ELSI)	\$ 2.2	\$ 2.9	\$ 2.9	\$ 3.0	\$ 2.4	
Total	\$ 296.5	\$ 275.1	\$ 275.1	\$ 278.6	\$ 273.9	

Change in Spending:

Actual spending decreased by \$22.6M compared to 2007-08 mainly due to reduced spending on the Researchers and Trainees Program Activity. With the expansion to the Canada Graduate Scholarship (CGS) Program and in recognition that many researchers and trainees benefit from their participation in Open Operating Grant Program (OOGP) funded projects, it was determined that some funding from this Strategic Outcome could be transferred to Strategic Outcome #1.

Total Authorities:

Total authorities increased by \$3.5M during the year which was mainly due to the base budget increase from Budget 2008. As well, some additional authorities for specific programs were also provided including \$0.3M for the Canadian Foreign Supplement Program and \$0.3M for the Vanier-CGS Program.

Actual Spending:

Actual spending was \$4.7M less than the total authorities approved, reflecting the decision to reallocate funding towards the OOGP.

Strategic Outcome # 3: Knowledge Translation and Commercialization. Health research is translated and adopted into practice, programs and policies that contribute to more effective health services and products, a strengthened health care system, and the improved health of Canadians

Performance Indicator	Target
1. Changes in health practice, programs or policies informed by CIHR-funded research, improvements in service delivery informed by CIHR-funded research.	Evidence of changes in health practices, programs, policies, health service delivery or health due to work of CIHR funded researchers.
2. Commercial activity – products (IP), companies and employment generated as a result of CIHR-funded projects.	Evidence of commercial activity due to work of CIHR funded researchers.
3. Changes in the health and quality of life of Canadians in areas of CIHR investment as a result of CIHR-funded projects.	Maintain or increase international ranking related to quality of life.

2008-09 Performance

- The reports of its Institutes and other sources have provided some evidence of the positive impact of CIHR-funded research on health practices, programs, policies and health service delivery. For example:
 - The [Canadian Dementia Knowledge Translation Network \(CDKTN\)](#) was established to accelerate the uptake of evidence for improved diagnosis, treatment and care in dementia by linking researchers to research users (e.g. front-line workers). CDKTN is a network for translation and exchange of research in Alzheimer disease and dementia.
 - CIHR-supported researchers developed innovative genetic techniques, involving a gene called piggyback, that make it possible to develop pluripotent stem cells from anyone, and to direct these stem cells into becoming the type of cells needed for cell replacement of a diseased tissue. This research should bring [stem cell treatment](#) for many diseases to the clinic.
 - CIHR is helping to resolve the question, “Is it better and safer to perform bypass surgery while a patient is on a heart-lung machine or directly on a beating heart?” by funding the world’s largest cardiac surgery clinical trial, involving 4,700 patients in 100 cardiac surgical centres across 16 countries. Led by Drs. André Lamy and Salim Yusuf at Hamilton Health Sciences, McMaster University, the 7.5 year CORONARY trial will investigate the differences in outcomes of the two techniques during coronary artery bypass surgery. “This trial will change practice around the world and play a key role in reducing complications for patients who undergo cardiac surgery, “ says Dr. Lamy.
- The reports of the Institutes and other sources have provided some evidence that CIHR-funded research has led to significant commercial activity. For example:
 - A [Network Centres of Excellence \(NCE\) evaluation](#) found that, while many of the positive outcomes of the NCE Program are shared with other network-related programs, it performs better than these programs in some key areas, such as the creation of structured networks, the establishment of intersectoral partnerships, and knowledge utilization — in particular, the commercialization of research findings.
 - A preliminary report on patents awarded to Canadian health scientists from 2002 to 2007 shows that CIHR has supported more than 70% of those inventors and innovators obtaining patents in health during that period.
 - Dr. Charles Bernstein and his team focused on the hypothesis that colon tumours shed both cells and chemicals that are characteristic of the tumour. The team used magnetic resonance spectroscopy and advanced mathematical methods to produce a chemical signature of stool samples prior to a patient undergoing colonoscopy, thus eliminating the need for invasive colonoscopy for patients who tested negative. The team has published their findings, established two patents on the technology, and are

collaborating with a North American company to bring the technology to market.

3. Numerous studies using different methodologies seek to measure quality of life. Canada's ranking is generally high and occasionally is very high. For example:
 - Canada ranks 3rd worldwide in terms of the Human Development Index, which considers measures of life expectancy, literacy, educational attainment and per capita Gross Domestic Product (GDP).
 - Canada ranks 11th, among 24 OECD countries in terms of overall health performance and third overall amongst G7 countries in terms of life expectancy.
 - Canada's health care system ranks 30th out of 191 nations by the World Health Organization based on measures of the health status of the population, the responsiveness of the health system and national health expenditures.
 - Canada ranks 23rd among 30 countries according to the Euro-Canada Health Consumer Index that incorporates measures of patient rights and information wait times for various treatments, clinical outcomes and provision of pharmaceuticals.

Financial Summary: Strategic Outcome #3 (in millions of dollars)

Program Activity	2007-08 Actual Spending	2008-09				Alignment to Government of Canada Outcomes
		Main Estimates	Planned Spending	Total Authorities	Actual Spending	
3.1 Knowledge Translation of Health Research	\$ 39.8	\$ 40.8	\$ 40.8	\$ 43.6	\$ 41.5	Healthy Canadians
3.2 Commercialization of Health Research	\$ 98.3	\$ 27.5	\$ 27.5	\$ 33.7	\$ 28.5	An Innovative and Knowledge-Based Economy
Total	\$ 138.1	\$ 68.3	\$ 68.3	\$ 77.3	\$ 70.0	

Change in Spending:

Actual spending was \$68.1M less than 2007-08 spending due in large part to \$69.1M of one-time funding for the launch of the Centres of Excellence in Commercialization and Research (CECR) Program. That program was announced as part of the 2007 Federal Budget with the initial recipients receiving their funding up-front in the form of a lump sum.

Total Authorities:

Total authorities increased by \$9.0M during the year. This increase was due primarily to \$4.4M additional funding announced for the second round of the CECR Program grants and \$1.7M of funding for the new Business Led- Networks of Centres of Excellence (BL-NCE) Program. Additionally, CIHR invested an additional \$3.8M in knowledge translation and commercialization activities as a result of the base budget increase in the 2008 Federal Budget.

Actual Spending:

Actual spending was \$7.3M less than total authorities. Program spending on Knowledge Translation grant programs was \$2.1M less than originally planned because CIHR received some of its additional authorities very late in the fiscal year, therefore not having time to launch new funding opportunities. Program spending in certain industry-partnered programs, such as the Small and Medium Enterprise research program and the CIHR and Canada's Research Based Pharmaceutical companies, fell short of planned spending by \$5.2M. Surplus funding was reallocated to the Open Operating Grants Program (OOGP) in Strategic Outcome #1.

Contribution of Priorities to Strategic Outcomes

This table reports on progress with respect to the strategic priorities identified in CIHR's 2008-2009 Report on Plans and Priorities (RPP) Section IV.

Operational Priorities	Type	Status	Links to Strategic Outcome(s)
Renewing CIHR's strategic priorities	Previously committed to	Successfully Met <ul style="list-style-type: none"> ◆ Developed a consultation draft of CIHR's second 5-year Strategic Plan that focuses on three key directions: <ul style="list-style-type: none"> ○ invest in world-class excellence; ○ address health and health system research priorities; and ○ accelerate the capture of health and economic benefits of health research. 	Strategic Outcomes 1, 2 & 3
Building a better and simpler CIHR	On-going	Somewhat Met <ul style="list-style-type: none"> ◆ Development of the Program Design Control Framework is ongoing and will result in: <ul style="list-style-type: none"> ○ programme structures being simplified; ○ new approaches to funding opportunities being implemented; and ○ programmes consolidated wherever possible. 	Strategic Outcomes 1, 2 & 3
Enhancing effectiveness of peer review	On-going	Successfully Met <ul style="list-style-type: none"> ◆ Operational processes streamlined and standardized ; ◆ Enhanced implementation of electronic processing of applications; ◆ Training and instructional materials improved and expanded; and ◆ Revised the evaluation criteria for grant applications. 	Strategic Outcomes 1 & 2
Utilizing technology to enhance service delivery	On-going	Successfully Met <ul style="list-style-type: none"> ◆ Expanded the services delivered through ResearchNet, the single point of online access for researchers to conduct business with CIHR; ◆ Participated in the development of a 3-year Business Plan for the continued growth of the Canadian Common CV Network, a shared service providing over 20 research funding organizations, including CIHR, with CV application services; and ◆ Implemented a new search engine and redesigned CIHR's website to provide better service to the research community through improved and advanced search results and more streamlined access to information. 	Strategic Outcomes 1 & 2
Evaluating our performance	On-going	Successfully Met <ul style="list-style-type: none"> ◆ Five-year evaluation plan completed; ◆ Four internal audits and four evaluations of various programs were completed in 2008-09. See Table 11 for more details. 	Strategic Outcomes 1, 2 & 3
Improving reporting of health research and impacts	On-going	Successfully Met <ul style="list-style-type: none"> ◆ Implemented a framework and indicators for measuring the value of investments in health research; and 	Strategic Outcomes 1, 2 & 3

Management Priorities	Type	Status	Links to Strategic Outcome(s)
		<ul style="list-style-type: none"> ◆ Completed the development and pilot testing of a Research Reporting System in ResearchNet. 	
Ensuring a committed workforce	On-going	Successfully Met <ul style="list-style-type: none"> ◆ Continued to provide a leadership development program; ◆ Improved internal HR systems; and ◆ Developed and implemented the Human Resources Plan. 	Strategic Outcomes 1, 2 & 3
Advancing modern management practices	On-going	Successfully Met <ul style="list-style-type: none"> ◆ Implemented the necessary changes to policy procedures and practices to strengthen areas of weakness identified in the 2006 MAF Assessment; and ◆ Completed phase 1 of the Internal Controls for Financial Reporting Project. 	Strategic Outcomes 1, 2 & 3
Ensuring the smooth Scientific Director/Host Institution transitions for five CIHR Institutes	Previously committed to	Successfully Met <ul style="list-style-type: none"> ◆ Successfully transitioned five (5) Institutes with the transition of 6th Institute expected to be completed by December of 2009. 	Strategic Outcomes 1, 2 & 3

Risk Analysis

CIHR's programs and priorities are often affected by factors outside its control. Nevertheless, CIHR continuously assesses opportunities, challenges and risks at three levels: strategic, programs and corporate. For environmental scanning and response development at a strategic level, each of the 13 Institutes relies on its Advisory Board to provide a wide variety of perspectives on health and health research issues. These Boards identify threats to the health of Canadians and opportunities for rapid advances in health knowledge and develop strategic research initiatives in response. At the program level, CIHR managers continuously monitor the different types of support required for researchers and the appropriateness of the design of CIHR's research funding mechanisms. At the corporate level, each of CIHR's functional areas (e.g. Human Resources, Finance and Evaluation) regularly reviews the effectiveness and efficiency of CIHR's operations to identify weaknesses and opportunities for improvement. Risks and challenges for CIHR are, by the nature of its business, horizontal and cut across all strategic outcomes rather than being specific to any one strategic outcome.

CIHR has to maintain a balance between supporting long-term research projects, thereby locking-in future funds, and reserving enough future funding for new opportunities that, although currently unknown, are sure to present themselves in future years. To better manage this balancing act, CIHR has introduced investment modelling to better forecast the future impacts of current funding decisions and to introduce the concept of "steady state" dynamics to ensure relative stability in the number of new applications funded annually and success rates across time. CIHR also developed a five year Investment Road Map to help plan the future evolution of its programming and to ensure an appropriate balance between investigator-driven "open" research, and research that is targeted at priorities identified by CIHR and Government.

Evaluating the results and outcomes of CIHR-funded research is challenging as causal links between health research inputs, outputs and impacts are difficult to trace when knowledge develops incrementally over time and through multiple channels. Attribution of credit for research impacts can also be complex, as impacts often result from a number of research projects carried or funded either collaboratively or independently in the same and/or different countries. By using a framework and indicators for measuring the value of investments in health research, CIHR anticipates going beyond the evaluation of outputs

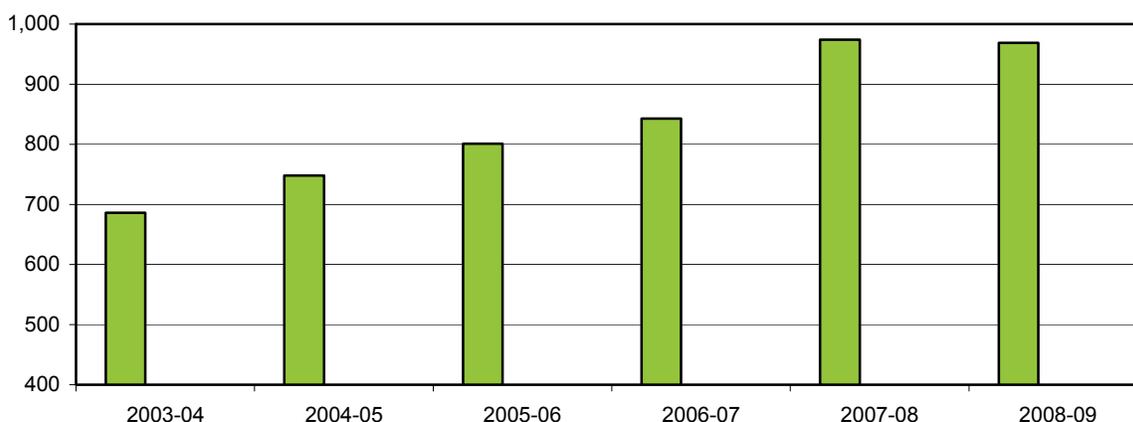
associated with individual programs or grants to broader conclusions around the results and outcomes of health research.

In 2008-09 CIHR developed and piloted its end-of-grant reporting tool which will allow researchers to document the impacts of their research. Over time this tool will provide significant information on the results of the research funded by CIHR and will provide a framework to guide future programming choices and resource allocation.

Finally, CIHR continues to be challenged by the increasing number of high-quality applications submitted by researchers. CIHR relies on peer review to assess and rank applications but the increase in CIHR's funding opportunities and applications is putting a strain on the peer review process. In 2008-09, CIHR launched an initiative to ensure the sustainability and continued effectiveness of peer review. The application of technology and the standardization of business processes will make peer review more efficient while measures to rationalize programs and funding opportunities will help contain demand for peers.

Expenditure Profile

CIHR Actual Spending Since 2003-04 (in \$ millions)



CIHR expenditures increased from \$686.2M in 2003-04 to \$974.1M in 2007-08, an increase of \$287.9M (or 42%) in five years. Since its creation in 2000, CIHR's budget has increased every year until 2008-09 when its spending was marginally less than in the previous year.

Voted and Statutory Items

(In millions of dollars)					
Vote # or Statutory Item (S)	Truncated Vote or Statutory Wording	2006-07 Actual Spending	2007-08 Actual Spending	2008-09 Main Estimates	2008-09 Actual Spending
20	Operating expenditures	\$ 39.4	\$ 42.8	\$ 42.9	\$ 47.2
25	Grants	\$ 799.7	\$ 926.7	\$ 881.3	\$ 916.9
(S)	Contributions to employee benefit plans	\$ 4.2	\$ 4.6	\$ 4.4	\$ 5.3
Total		\$ 843.3	\$ 974.1	\$ 928.6	\$ 969.4

SECTION II: ANALYSIS OF PROGRAM ACTIVITIES BY STRATEGIC OUTCOME

Strategic Outcome #1: Advances in Health Knowledge

CIHR supports research that is likely to create knowledge to improve human health or the health system. For instance, this knowledge could be about the cause of a disease, a new preventive measure or better treatment procedures. CIHR uses a rigorous process called “peer review” to evaluate which research projects to fund. Depending on the program, projects are evaluated on the basis of their scientific excellence, their importance and potential impact, and their relevance to government priorities.

Strategic Outcome	Program Activities	Sub-Program Activities
1. Advances in Health Knowledge	1.1 Open Research	1.1.1 Open Operating Grants Program
		1.1.2 Randomized Controlled Trials
		1.1.3 Team Grants Program
	1.2 Strategic Priority Research	1.2.1 Strategic Priority Operating Grants Program
		1.2.2 Large Strategic Initiatives
		1.2.3 HIV/AIDS Research Initiative
		1.2.4 Pandemic Preparedness Initiative
		1.2.5 Expensive Drugs for Rare Diseases
		1.2.6 National Anti-Drug Strategy Treatment Initiative

Program Activity Summary

Open Research aims to advance health knowledge through an “open” competitive program designed to stimulate innovation and creativity. It is an investigator-driven program that funds a full spectrum of health research. Strategic Priority Research, on the other hand, funds targeted research into critical areas.

Program Activity: 1.1 Open Research					
2008-09 Financial Resources (\$ millions)			2008-09 Human Resources (FTEs)		
Planned Spending	Total Authorities	Actual Spending	Planned	Actual	Difference
\$ 462.6	\$ 470.9	\$ 493.9	228	205	23
Expected Results Excellent health research conducted responding to best researcher ideas, through effective funding programs					
Performance Indicator Success of CIHR research programs including results, awareness and satisfaction levels.	Target			Performance Status	
	1. Evaluated programs demonstrate effectiveness and results.			1. Mostly Met	
2. Maintain or increase the number of applications submitted per \$ of funding available.			2. Met All		

Performance Summary

- Reports by researchers provide some evidence that the programs demonstrate effectiveness and results. For example:
 - In 1992 Dr. Samuel Weiss discovered neural stem cells in the brains of adult mammals. Dr. Weiss made this discovery quite unexpectedly, while looking at how to use growth factors to protect the brain. Since then his research has focused on understanding how neural stem cells work and how they can be used to heal neural tissue and help people recover from brain and spinal cord injuries or diseases. In recognition of this work, Dr. Weiss received a 2008 Gairdner International Award, one of the world's most prestigious awards for medical research.
 - Dr. Peter St. George-Hyslop has done pioneering research into the causes and consequences of Alzheimer's and other neurodegenerative diseases. This research has paved the way for the development of new treatments for these diseases. For example, in 2006, he found a sugar-like substance which stops the build-up of toxic plaque in mice with Alzheimer's disease. Dr. St. George-Hyslop won a 2008 Killam Prize for this work.

The number of applications received for this Program Activity is an indication of awareness and research capacity levels. 3,813 applications were received in 2008-09, compared to 3,740 last year. The number of fundable applications is an indication of program effectiveness as well as overall quality of submitted proposals. 66% of the applications submitted were fundable, as compared to 67% last year.
- 8.2 applications were submitted per \$1M of funding available which was substantially the same as last year notwithstanding the increase in both the funding and the total number of applications received.

Performance Indicator	Target	Performance Status
Proportion of overall expenditures from CIHR grants budget	45% of overall grants budget	Exceeded

Performance Summary

51% of overall grants budget was spent compared to a target of 45%.

Program Activity: 1.2 Strategic Priority Research

2008-09 Financial Resources (\$ millions)			2008-09 Human Resources (FTEs)		
Planned Spending	Total Authorities	Actual Spending	Planned	Actual	Difference
\$ 122.6	\$ 147.2	\$ 131.6	60	55	5

Expected Results

Excellent health research conducted responding to research priorities, through effective funding programs

Performance Indicator	Target	Performance Status
Success of CIHR research programs including results, awareness, satisfaction levels, and appropriateness of priorities	1. Evaluated programs demonstrate effectiveness and results.	1. Mostly Met
	2. Maintain or increase the number of applications submitted per \$ of funding available.	2. Met All

Performance Summary

- Evaluated programs demonstrate effectiveness and results through the following examples:
 - A major evaluation of the [HIV/AIDS Community-based Research Program](#) was led by the Public Health Agency of Canada in 2008-09. Overall, the evaluation concluded that the program was helping communities and academia respond to the HIV/AIDS epidemic, building research capacity at the community level and in academic circles.

- A midterm evaluation of the [Pandemic Preparedness Strategic Research Initiative](#) (PPSRI) led by the Public Health Agency of Canada found that the program has been especially successful in developing solid and productive partnerships, developing consensus on research priorities, implementing tools to address these priorities and providing a solid foundation for future success. The overall conclusion of the evaluation is that the program's design, delivery and initial outputs are ensuring that its goals of improving Canada's pandemic preparedness and increasing research capacity in the area can be met.

The number of applications received for this Program Activity is an indication of awareness and research capacity levels. 1,359 applications were received in 2008-09, compared to 989 last year. The number of fundable applications is an indication of program effectiveness as well as of quality of application received. 72.7% of all evaluated applications received were fundable compared to 69.3% last year.

2. 10.9 applications were submitted per \$1M of funding available which was substantially the same as last year notwithstanding the increase in both the funding and the total number of applications received.

Performance Indicator	Target	Performance Status
Proportion of overall expenditures from CIHR grants budget	9% of overall grants budget	Exceeded

Performance Summary
13.6% of overall grants budget was spent compared to a target of 9%

Benefits for Canadians

CIHR invests heavily in research which leads to advances in health knowledge. This research accounts for approximately 65% of CIHR's overall Grants and Awards expenditures. Initiatives such as the Pandemic Preparedness Strategic Research Initiative or the Canadian Longitudinal Study on Aging are examples of research that will help protect Canadians from disease and provide comprehensive data for better health outcomes and resulting improved techniques will enhance quality of life and lower health costs. These programs also build research capacity across Canada, providing high-quality jobs for Canadians and stimulating the economy.

Performance Analysis

In 2008-09, both the Open Research and the Strategic Priority Research program activities successfully supported advances in health research knowledge in Canada, positively affecting the health of Canadians and their health system. The research community was aware of and satisfied with CIHR's services and programs. Strategic priorities were identified and addressed through appropriate funding opportunities. Targets in relation to expenditures and numbers of applications were met or exceeded. Actual spending for the Open Operating Grants Program at \$411.8M was \$29.8M more than had been originally planned as a result of funds reallocated from other grants and awards programs across all strategic outcomes to enable CIHR to fund more of the outstanding fundable proposals received for this program.

Lessons Learned

Peer review is essential to ensure excellence. However, the steady growth in CIHR programming and applications from researchers is straining the peer review system. CIHR is taking measures to increase the efficiency of peer review and to streamline and standardize its programming.

Strategic Outcome #2: People and Research Capacity

CIHR's second strategic outcome is a strong and talented health research community in Canada that is among the best and most innovative and productive in the world. CIHR's funding does this in part by helping Canadian institutions to attract and retain the "best and the brightest".

Strategic Outcome	Program Activities	Sub-Program Activities
2. A strong and talented health research community with the capacity to undertake health research	2.1 Researchers and Trainees	2.1.1 Salary Support Programs
		2.1.2 Training Support Programs
		2.1.3 Canada Research Chairs Grants
		2.1.4 Canada Graduate Scholarships
		2.1.5 Strategic Salary Support Programs
		2.1.6 Strategic Training Support Programs
	2.2 Research Resources and Collaboration	
	2.3 National and International Partnerships	2.3.1 Institute Support Grants
		2.3.2 Partnership Programs
	2.4 Ethical, Legal and Social Issues	

Program Activity Summary

The main instruments used by CIHR to develop a community of outstanding health researchers include salary and training awards for researchers and trainees, Canada Graduate Scholarships for students, and the Canada Research Chair grants for proven investigators. Other programming is designed to foster collaborations and partnerships and research into ethical, legal and social issues.

Program Activity: 2.1 Researchers and Trainees					
2008-09 Financial Resources (\$ millions)			2008-09 Human Resources (FTEs)		
Planned Spending	Total Authorities	Actual Spending	Planned	Actual	Difference
\$196.1	\$ 198.2	\$ 188.9	97	78	19
Expected Results					
A supply of highly qualified health researchers and trainees is available to conduct excellent research in areas of strength or need as a result of effective funding programs.					
Performance Indicator Success of CIHR-funded salary and training programs including results, awareness, satisfaction levels and appropriateness of funding opportunities developed for capacity development	Target		Performance Status		
	1. Evaluations of programs demonstrate effectiveness and results.		1. Mostly Met		
2. Maintain or increase the number of applications submitted per \$ of funding available.		2. Exceeded			
Performance Summary					
1. Evaluated programs demonstrate effectiveness and results through the following examples: <ul style="list-style-type: none"> Reports on the recently completed Canada Graduate Scholarships (CGS) Program evaluation, as well as preliminary results from the Doctoral Research Award (DRA) evaluation, will soon be posted with management responses. Recommendations regarding improvements to these programs are expected to help refine the current delivery and design approach in all cases. 					

- An evaluation completed in 2008 of the [Strategic Training Initiatives in Health Research](#) (STIHR) Program concluded that it had performed well in terms of trainees' disciplinary background, early scholarly productivity, and perceptions of the training environment and trainee experience. Additionally, the program appears to be increasing the number of research training opportunities for health systems and services and clinical trainees.
- The [fifth-year evaluation of the Canada Research Chairs Program](#) concluded that it had helped to create a research environment that is conducive to the long-term retention and attraction of top researchers. Chairholders reported significant increases in research productivity and the number of highly-qualified personnel being trained at the graduate level since receiving their Chair awards compared to other researchers over the same time period. Also, they reported research impacts such as patents, inventions and potential health treatments which could be at least partly attributable to the program. It also attracted between \$218M and \$342M in additional research funds.

The number of applications received for this Program Activity is an indication of awareness and satisfaction levels. 3,803 applications were received in 2008-09, compared to 3,013 last year. The number of fundable applications is an indication of program effectiveness as well as the depth of the research field. 93.8% of the applications submitted were fundable, compared to 95.7% last year.

2. 21.4 applications were submitted per \$1M of funding available which was an increase of 5.1 applications per \$1M from last year.

Performance Indicator Proportion of overall expenditures from CIHR grants budget	Target Funding equal to 19% of overall grants budget	Performance Status Met All
Performance Summary 19.4% of overall grants budget was spent compared to a target of 19%		

Program Activity: 2.2 Research Resources and Collaboration					
2008-09 Financial Resources (\$ millions)			2008-09 Human Resources (FTEs)		
Planned Spending	Total Authorities	Actual Spending	Planned	Actual	Difference
\$ 50.9	\$ 52.0	\$ 58.9	25	24	1
Expected Results High quality research resources are available for excellent health research as a result of effective funding programs					
Performance Indicator Success of CIHR-funded research resources and collaboration programs including results, awareness, satisfaction levels and appropriateness of funding opportunities for research resources.	Target 1. Evaluated programs demonstrate effectiveness and results.		Performance Status 1. Mostly Met		
	2. Maintain or increase the number of applications submitted per \$ of funding available.		2. Exceeded		
Performance Summary 1. There has not been a comprehensive evaluation of this program as many of the activities are of recent origin. Reports from program managers, researchers and partners for projects such as the Canadian Light Source and the Structural Genomics Consortium are positive. The number of applications received is a recognized indication of awareness and satisfaction levels. In 2008-09, 558 applications were received, compared to 122 last year. In addition, the number of fundable applications is an indication of program effectiveness as well as the depth of the research field. 83.2% of the applications submitted were fundable, a significant increase of 11.1% from last year.					
2. 10.0 applications were submitted per \$1M of funding available in 2008-09; a large increase from 2.5 applications submitted per \$1M in funding in 2007-08.					

Performance Indicator Types of support by area of health research (by theme and Institute)	Target Maintain diversity of health research support (proportions by theme and Institute)	Performance Status Met All
Performance Summary All themes and all Institutes were funded.		
Expected Results Appropriate resources available that enable adequate research resources		
Performance Indicator Proportion of fundable applications received by CIHR that are funded	Target 90% of fundable applications are funded	Performance Status Mostly Met
Performance Summary 84.9% of fundable applications were funded which is slightly lower than the target of 90%		
Performance Indicator Proportion of overall expenditures from CIHR grants budget	Target 5% of overall grants budget	Performance Status Met All
Performance Summary 6.1% of overall grants budget was spent compared to a target of 5%		

Program Activity: 2.3 National and International Partnerships

2008-09 Financial Resources (\$ millions)			2008-09 Human Resources (FTEs)		
Planned Spending	Total Authorities	Actual Spending	Planned	Actual	Difference
\$ 25.2	\$ 25.4	\$ 23.7	12	10	2

Expected Results National and international health research agendas are formulated and implemented, and increased relevance and quantity of research is achieved as a result of strong alliances and partnerships.		
Performance Indicator Success of CIHR-funded partnership research programs including results, awareness and satisfaction levels.	Target 1. Evaluated programs demonstrate effectiveness and results.	Performance Status 1. Somewhat Met
	2. Maintain or increase the number of applications submitted per \$ of funding available.	2. Met All

Performance Summary		
<p>1. There has not been a recent evaluation of the program. However, reports from program managers, researchers and partners for the Human Frontier Science Program (HFSP), the Regional Partnership Program and the Small Health Organizations Partnership Program are positive.</p> <p>The Institute Support Grant program was extensively reviewed by CIHR and Treasury Board over the last three years, with the conclusion that it was the most appropriate and efficient mechanism for the operation of the Institutes.</p> <p>The number of applications received for this Program Activity is an indication of awareness and satisfaction levels. 103 applications were received in 2008-09, compared to 94 last year. The number of fundable applications is an indication of program effectiveness as well as the depth of the research field. 56.3% of the applications submitted were fundable, compared to 87.2% last year.</p>		
<p>2. 6.0 applications were submitted per \$1M of funding available which was substantially the same as last year.</p>		

Performance Indicator Proportion of overall expenditures from CIHR grants budget	Target 2% of overall grants budget	Performance Status Met All
Performance Summary 2.4% of overall grants budget was spent compared to a target of 2%		

Program Activity: 2.4 Ethical, Legal and Social Issues (ELSI)					
2008-09 Financial Resources (\$ millions)			2008-09 Human Resources (FTEs)		
Planned Spending	Total Authorities	Actual Spending	Planned	Actual	Difference
\$ 2.9	\$ 3.0	\$ 2.4	2	2	-
Expected Results Health research conducted more ethically as a result of effective funding programs					
Performance Indicator Outputs and impacts of funded research	Target 1. Evaluated programs demonstrate effectiveness and results.		Performance Status 1. Somewhat Met		
	2. Maintain or increase the number of applications submitted per \$ of funding available.		2. Met All		
Performance Summary <p>1. There has not been a recent evaluation of the program. However, reports from program managers, researchers and partners are positive.</p> <p>The number of applications received for this Program Activity is an indication of awareness and research capacity levels. In 2008-09, 38 applications were received compared to 25 last year. The number of fundable applications is an indication of program effectiveness as well as of quality of the proposals submitted. In 2008-09, 68.4% of the applications submitted were fundable as compared with 88% last year.</p> <p>2. 17.3 applications were submitted per \$1M of funding available which was approximately the same as last year.</p>					
Performance Indicator Proportion of overall expenditures for research targeted to strategic areas pertaining to ethical, legal and social issues in the context of health and health research.	Target 0.2% of overall grants budget		Performance Status Met All		
Performance Summary 0.2% of overall grants budget was spent which is the same as the target.					

Benefits for Canadians

Under the S&T Strategy, the government is committed to creating a "People Advantage" by measures including the attraction, retention and development of a highly-skilled workforce. As the Strategy notes, "talented, skilled, creative people are the most critical element of a successful national economy." These programs help to stimulate innovation in health science and services, high-value economic activity and employment, and international recognition for Canadian institutions and researchers. CIHR supports over 13,000 researchers and trainees. These programs also ensure that researchers acquire up-to-date equipment, databases and facilities, and thus increase the scope and impact of their research. Finally, CIHR's work in ethics fosters research safety and integrity and increases public trust in health research.

Performance Analysis

The results of the four Program Activities successfully supported a strong and talented health research community in Canada. In 2008-09, the numbers of applications suggest that researchers are well aware of CIHR's programs and that they are relevant to them. CIHR's funding was well distributed by type of research (both by theme and by Institute), helping to ensure a broad and diverse research base capable of responding to the changing health research needs and priorities of Canadians. CIHR provided resources and support to thousands of researchers, trainees, and students so that Canadian institutions could retain the "best and the brightest". Targets in relation to expenditures and numbers of applications were met or exceeded. The outputs and the impacts of the programs (as evidenced by evaluations or reports from program managers, researchers or partners) either met, or somewhat met the targets. These programs will be reviewed in the coming year to either enhance their systems and services or to redirect the funding more effectively.

Lessons Learned

CIHR recognizes that it must strengthen its support of postdoctoral trainees and early career researchers. Our challenge is to provide young investigators with the mentoring and operational support that they require to successfully pursue careers in academia as well as the private and not-for-profit sectors.

Strategic Outcome # 3: Knowledge Translation and Commercialization

Knowledge translation, a main component of CIHR's mandate, is a dynamic and iterative process that includes synthesis, dissemination, exchange and ethically-sound application of knowledge to improve the health of Canadians, provide more effective health services and products and strengthen the health care system. CIHR supports and facilitates knowledge translation by funding knowledge translation research, knowledge synthesis and dissemination of findings, exchange and application activities and by building knowledge translation networks. Through its commercialization programs, CIHR supports research and knowledge translation activities that can lead to commercial applications to improve health and the Canadian economy.

Strategic Outcome	Program Activities	Sub-Program Activities
3. KT & Commercialization	3.1 Knowledge Translation of Health Research	3.1.1 Knowledge Translation Programs
		3.1.2 Networks of Centres of Excellence Grants Program
	3.2 Commercialization of Health Research	

Program Activity Summary

Knowledge Translation and Health Research funds knowledge translation research and activities, and supports partnerships that can accelerate knowledge translation. CIHR also develops measurement, analysis and evaluation policies, frameworks and tools to assess the outcomes and impacts of CIHR-funded research aimed at knowledge translation. Commercialization of Health Research funds a number of programs that work closely with industry to facilitate the commercialization of research.

Program Activity: 3.1 Knowledge Translation and Health Research

2008-09 Financial Resources (\$ millions)

2008-09 Human Resources (FTEs)

Planned Spending	Total Authorities	Actual Spending	Planned	Actual	Difference
\$ 40.8	\$ 43.6	\$ 41.5	20	17	3

Expected Results

Health research is translated more effectively as result of funding programs

Performance Indicator	Target	Performance Status
Success of CIHR research programs including results, awareness and satisfaction levels.	1. Evaluated programs demonstrate effectiveness and results.	1. Met All
	2. Maintain or increase the number of applications submitted per \$ of funding available.	2. Met All

Performance Summary

1. Evaluated programs demonstrate effectiveness and results through the following examples:

- In 2007-08 the Networks for Centres of Excellence (NCE) Program was evaluated both from a program effectiveness/efficiency standpoint, as well as from a relevance and “niche” standpoint. Both evaluations were positive, and identified the program’s direct contributions to the government’s S&T priorities. A recent analysis found that 10% of all university spin-off companies, including Xenon Genetics, one of the most successful biomedical companies, could be attributed to the NCE Program.
- CIHR concluded a case study of one of its KT funded projects in which researchers worked closely with a local health authority. They identified best practices and developed guidelines for local use. The result was an increase in healing rates from 23% to 56% and a reduction in the number of nursing visits from 3.1 to 2.1 per week.

The number of applications received for this Program Activity is an indication of awareness and satisfaction levels. In 2008-09, 409 applications were received compared to 283 last year. The number of fundable applications is an indication of program effectiveness as well as the depth of the research field. In 2008-09, 74.8% of the applications submitted were fundable, compared to 69.6% last year.

2. 10.5 applications were submitted per \$1M of funding available which was substantially the same as in 2007-08.

Performance Indicator	Target	Performance Status
Number, scope and diversity of knowledge translation activities supported by CIHR (and its partners, where relevant) or resulting from CIHR activities.	Maintain or increase the number, scope and diversity of KT activities.	Mostly Met

Performance Summary

[Diversity of research supported](#): KT program research is supported across the mandates of all 13 institutes, but was concentrated in one main area in 2008-09..

Performance Indicator	Target	Performance Status
Number and types of stakeholders as well as types of knowledge translation activities during the research process.	Maintain or increase number and types of stakeholders involved in KT.	Mostly Met

Performance Summary

Reports from program managers, researchers and partners indicate that the number and diversity of stakeholders involved in KT have been maintained. As an example, in 2008-09, the NCE Program involved a total of 697 companies, 32 provincial and federal government departments and agencies, 100 hospitals, 694 universities, and 650 other organizations from Canada and abroad.

Performance Indicator Proportion of overall expenditures from CIHR grants budget.	Target 4% of overall grants budget	Performance Status Met All
Performance Summary 4.3% of overall grants budget was spent in 2008-09 which was marginally higher than the target of 4.0%.		

Program Activity: 3.2 Commercialization of Health Research					
2008-09 Financial Resources (\$ millions)			2008-09 Human Resources (FTEs)		
Planned Spending	Total Authorities	Actual Spending	Planned	Actual	Difference
\$ 27.5	\$ 33.7	\$ 28.5	14	12	2
Expected Results Health research is commercialized more effectively as a result of funding programs					
Performance Indicator Outputs and impacts of funded research.	Target 1. Evaluated programs demonstrate effectiveness and results.		Performance Status 1. Somewhat Met		
	2. Maintain or increase the number of applications per \$ of funding available.		2. Exceeded		
Performance Summary 1. There has not been a recent comprehensive evaluation of these programs however: <ul style="list-style-type: none"> An analysis of the Proof-of-Principle (PoP) Program, which supports researchers in demonstrating the commercial potential of their intellectual property (IP), found that 76% of funded grants resulted in new patents; 26% resulted in the licensing of IP; and 14% resulted in the creation of new companies. <p>The number of applications received for this Program Activity is an indication of awareness and satisfaction levels. In 2008-09, 210 applications were received compared to 386 last year. The number of fundable applications is an indication of program effectiveness as well as the depth of the research field. In 2008-09, 75.7% of the applications submitted were fundable, compared to 57.2% last year.</p> 2. 7.8 applications were submitted per \$1M of funding available which was double the number of applications submitted per \$1M in funding in 2007-08. This suggests increasing awareness for this program.					
Expected Results Appropriate resources available that enable commercialization of health research.					
Performance Indicator Proportion of fundable applications received by CIHR that are funded.	Target 55% of fundable applications are funded		Performance Status Exceeded		
Performance Summary 95.6% of fundable applications were funded, which is significantly higher than the target of 55%.					
Indicator Proportion of overall expenditures from CIHR grants budget.	Target 3% of overall grants budget		Status Met All		
Performance Summary 3% of overall grants budget was spent which was the same as the target.					

Benefits for Canadians

Programs under the Knowledge Translation and Commercialization Strategic Outcome mobilize some of Canada's best research talent in the Canadian academic community to engage Canadian and international partners to support the use of research evidence to improve health and the health system and to contribute to economic growth in Canada.

Performance Analysis

Evaluations and reports from program managers, researchers and partners provide some evidence that the Knowledge Translation of Health Research Program and the Commercialization Program are effective. The number of applications per dollar of funding available and percentage of fundable applications indicate that the research community is aware of these programs and interest in them is growing. With respect to diversity of research supported, KT program research was supported across the mandates of all 13 institutes with a concentration in the domain of health services and policy research. Number and types of stakeholders as well as types of knowledge translation activities during the research process were maintained in the period. Both programs met its proportion of overall grant expenditures targets.

Lessons Learned

CIHR will aim to continuously improve its programming and policies in this area and focus on partnerships between researchers and knowledge users in the private and public sectors to support knowledge translation activities. CIHR has established Knowledge Translation and Commercialization Advisory Committees to provide the President and the Vice President of Knowledge Translation with recommendations on how to improve this aspect of CIHR's programming.

SECTION III: SUPPLEMENTARY INFORMATION

Financial Highlights

(\$ thousands)

Condensed Statement of Financial Position At March 31, 2009	% Change	2009	2008
ASSETS			
Financial Assets	(56.5%)	16,236	37,328
Non-Financial Assets	21.4%	3,903	3,216
TOTAL ASSETS	(50.3%)	20,139	40,544
LIABILITIES	(45.0%)	24,327	44,259
EQUITY	12.7%	(4,188)	(3,715)
TOTAL LIABILITIES & EQUITY	(50.3%)	20,139	40,544

(\$ thousands)

Condensed Statement of Operations At March 31, 2009	% Change	2009	2008
Grants and awards expenses	(3.0%)	927,238	956,101
Refund of previous years' grants and awards	(6.0%)	(2,901)	(3,087)
Operations and administration expenses	6.4%	58,868	55,328
Total Expenses	(2.5%)	983,205	1,008,342
Total Revenues	10.4%	10,365	9,385
NET COST OF OPERATIONS	(2.6%)	972,840	998,957

Condensed Statement of Financial Position:

Total Assets and Total Liabilities both decreased by approximately \$20M compared to 2007-08. These decreases resulted largely from the accrual of a \$20M conditional grant (in the form of an endowment) that was to be paid to the Gairdner Foundation as at March 31, 2008. The Gairdner Foundation grant was subsequently disbursed in June of 2008, which explains the decrease in Total Assets and Total Liabilities of CIHR at March 31, 2009.

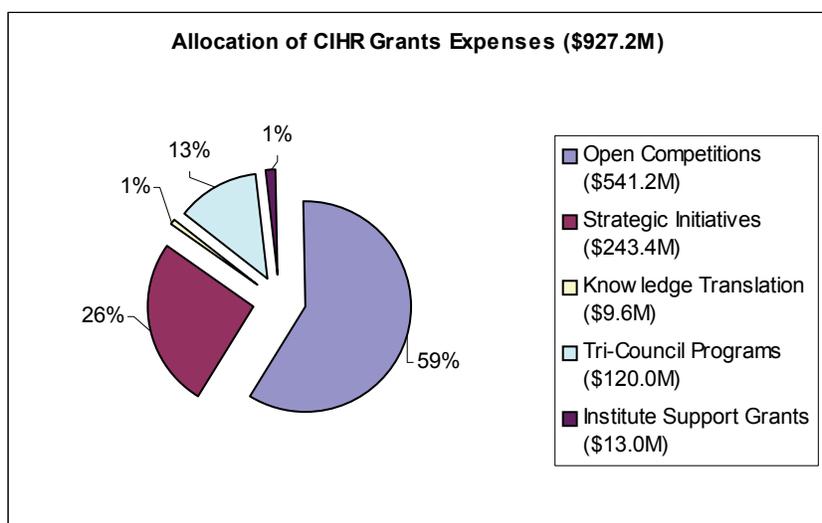
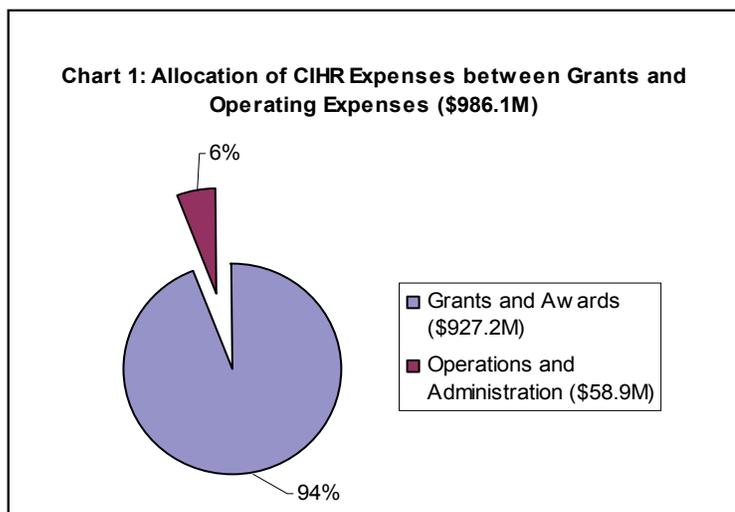
Condensed Statement of Operations:

Grants and awards expenses decreased by \$28.9M (or 3.0%) in 2008-09 compared to 2007-08. The primary reason for this decrease is due to the fact that in 2007-08, CIHR recorded a one-time \$20M expense pertaining to a conditional grant (in the form of an endowment) awarded to the Gairdner Foundation in March of 2008. This \$20M grant was expensed in CIHR's 2007-08 Statement of Operations. No such expense was incurred by CIHR in 2008-09. In addition, CIHR's total authorities declined by \$19.7M (or 2.0%) as compared to 2007-08, due primarily to a decrease to appropriations for the Centres of Excellence for Commercialization and Research Program. The combination of lesser authorities for CIHR as well as the one-time expense incurred in 2007-08 for the Gairdner Foundation grant resulted in a \$28.9M decrease in grants and awards expenses in 2008-09.

The Operations and Administration expenses increased by \$3.6M in 2008-09 due to higher employee wages and higher contributions to employee benefit plans. Revenues for 2008-09 remained fairly constant with revenues earned in 2007-08.

Financial Highlights Chart

As Chart 1 illustrates, CIHR allocates 94% of its available budget directly to health researchers across Canada to fund health research and knowledge creation, train the next generation of health researchers, build research capacity in under-developed areas and to focus on knowledge translation, so that the results of research are transformed into improved policies, practices, products and services which results in improved health for all Canadians. The remainder of its funding is used to finance CIHR's operations.



CIHR incurred the majority (59%) of its grants and awards expenses to fund Open competitions. CIHR recognizes that the creativity, skill, and insight of individuals and self-assembled teams lie at the heart of the research enterprise. The pursuit of excellence in research, as evaluated through the peer review process, inspires ideas that drive progress and ensures a continuous flow of fresh insights. As such, open competition programs enable individual researchers or groups of investigators to identify

research opportunities in any area of health research that they consider to be of importance or with unique opportunity.

Strategic initiatives comprise the second largest portion of CIHR grants and awards investments (26%). These investments target high priority research areas identified by CIHR's Institutes after broad consultations with stakeholders and partners. These strategic initiatives address emerging health threats and other important health issues of concern to Canadians including areas of health research such as obesity, cancer, vulnerable populations such as youth and aboriginals, pandemic preparedness, HIV/AIDS, or measures to improve the effectiveness of the Canadian health care system.

Knowledge Translation (KT) is a critical and growing part of CIHR's mandate focused on the synthesis, exchange and ethically-sound application of knowledge to accelerate the capture of the benefits of research for Canadians through improved health, more effective services and products and a strengthened health care system. In 2008-09, grants and awards expenses related directly to Knowledge Translation increased by 16.8%.

CIHR incurred 13% of its 2008-09 grants and awards expenses on tri-council programs – key Government of Canada flagship programs which are jointly administered by CIHR, Natural Sciences and Engineering Research Council (NSERC) and Social Sciences and Humanities Research Council (SSHRC). CIHR incurred expenses totalling \$87.7M on the Canada Research Chairs (CRC) Program. The CRC Program awards key research professorships at post-secondary institutions across Canada to attract and retain some of the world's most accomplished and promising minds. CIHR also spent \$27.9M on the Networks of Centres of Excellence (NCE) Program, which brings together partners from the academic, industry, public and non-public centres to conduct leading edge research and knowledge translation activities in areas of strategic growth and opportunity for Canada. CIHR incurred further expenses totalling \$4.4M on the Centres of Excellence for Research and Commercialization (CECR) Program. The CECR Program supports the operation of commercialization and/or research centres that bring together people, services, and infrastructure to maximize the benefits of the government's investments in skills and research and to encourage greater private sector investment in science and technology.

CIHR has 13 "virtual" institutes that represent the full spectrum of health science research. Each institute brings together research funders, researchers and research users, including policy-makers and practitioners, to set strategic priorities for research. Each host institution which houses a CIHR institute administers a \$1M Institute Support Grant to be used to meet the expenses of housing and running the institutes.

Financial Statements

Follow this link to view [CIHR's 2008-09 Audited Financial Statements](#).

List of Supplementary Information Tables

- Table 1: [Sources of Respendable and Non-Respendable Revenue](#)
- Table 5: [Details on Transfer Payment Programs](#)
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- Table 10: [Response to Parliamentary Committees and External Audits](#)
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