# CANADIAN INSTITUTES OF HEALTH RESEARCH

2008-09

# DEPARTMENTAL PERFORMANCE REPORT

LEONA AGLUKKAQ MINISTER OF HEALTH



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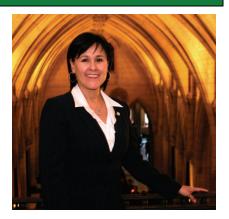
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# **MINISTER'S MESSAGE**

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

<u>CIHR</u> 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 <u>Natural Sciences and</u>
<u>Engineering Research Council</u> (NSERC) and <u>Social</u>
Sciences and Humanities Research Council (SSHRC),

CIHR Quick facts: 2008-2009

President: <u>Dr. Alain Beaudet</u>, 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:

<u>Dr. Jane Aubin</u>

Neurosciences, Mental Health and Addiction:

<u>Dr. Anthony Phillips</u>

Nutrition, Metabolism and Diabetes:

Dr. Philip M. Sherman

Population and Public Health: Dr. Nancy Edwards

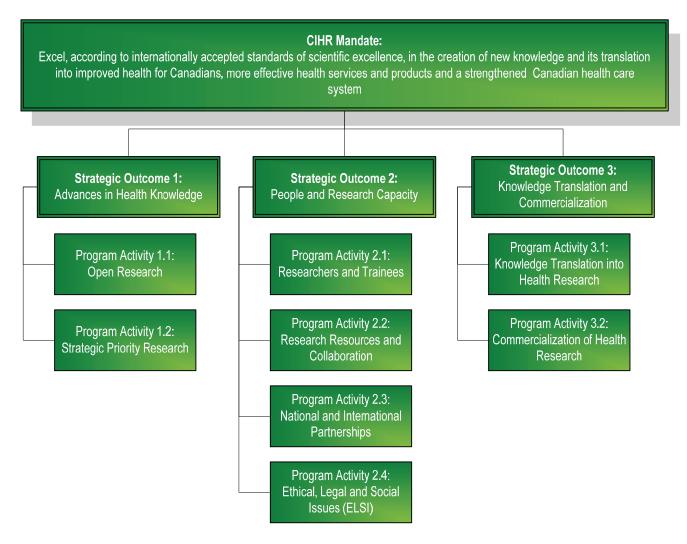
CIHR supports the work of over 13,000 health researchers and trainees

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 <u>Science & Technology Strategy</u>. 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 \$ 68.3 Translation and Commercialization		\$ 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

Pe	rformance 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 <u>OECD countries</u> studied in terms of health related research and development in government budgets as a percentage of the Gross Domestic Product (GDP).
- 2. 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 <u>cognitive</u> impairment. CIHR's work has led other organizations to increase their research in this area.
  - The <u>Canadian Lifelong Health Initiative</u> (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 10<sup>th</sup> in relation to international <u>medical research publications</u> 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. <u>Canada's average relative citation (ARC) factor</u> in medical research for 2007 was 1.34, well above the global average of 1.0. As a result Canada ranks 7<sup>th</sup> world-wide, a significant improvement from its rank of 13<sup>th</sup> in 2002.

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

Program	2007-08		200	Alignment to		
Activity		Main Estimates	Planned Spending	Total Authorities	Actual Spending	Government of Canada Outcomes
1.1. Open Research	\$ 426.4	\$ 462.6	\$ 462.6	\$ 470.9	\$ 493.9	An Innovative and
1.2. Strategic Priority Research	\$ 113.1	\$ 122.6	\$ 122.6	\$ 147.2	\$ 131.6	Knowledge-Based Economy
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

Pe	rformance 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.

- 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 <u>diversity of investigators funded by CIHR</u> 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)

	2007-08	2008-09				Alignment to
Program Activity	Actual Spending	Main Estimates	Planned Spending	Total Authorities	Actual Spending	Government of Canada Outcomes
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	
2.3 National and International Partnerships	\$ 24.0	\$ 25.2	\$ 25.2	\$ 25.4	\$ 23.7	Healthy Canadians
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

P	erformance 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

- 1. 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 <u>Canadian Dementia Knowledge Translation Network (CDKTN)</u> 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.
- 2. 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 <u>Network Centres of Excellence (NCE) evaluation</u> 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 3<sup>rd</sup> 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 11<sup>th</sup>, 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 30<sup>th</sup> 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 23<sup>rd</sup> 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)

		2007-08	2008-09				Alignment to
l	Program Activity	Actual Spending	Main Estimates	Planned Spending	Total Authorities	Actual Spending	Government of Canada Outcomes
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	Туре	Status	Links to Strategic Outcome(s)
Renewing CIHR's strategic priorities	Previously committed to	Successfully Met  ◆ Developed a consultation draft of CIHR's second 5-year Strategic Plan that focuses on three key directions:  ○ 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  ◆ Development of the Program Design Control Framework is ongoing and will result in:  ○ 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  ◆ 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  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  ◆ Five-year evaluation plan completed;  ◆ Four internal audits and four evaluations of various programs were completed in 2008-09. See <u>Table 11</u> for more details.	Strategic Outcomes 1, 2 & 3
Improving reporting of health research and impacts	On-going	Successfully Met  Implemented a framework and indicators for measuring the value of investments in health research; and	Strategic Outcomes 1, 2 & 3

		Completed the development and pilot testing of a Research Reporting System in ResearchNet.	
Management Priorities	Туре	Status	Links to Strategic Outcome(s)
Ensuring a committed workforce	On-going	Successfully Met  ◆ 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     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  Successfully transitioned five (5) Institutes with the transition of 6 <sup>th</sup> 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

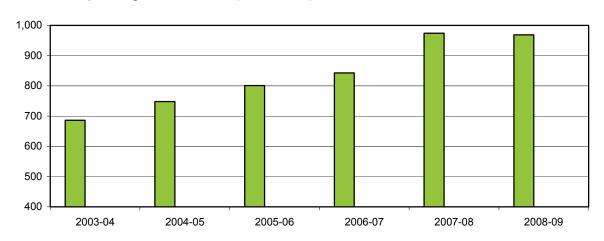
associated with individual programs or grants to broader conclusions around the results and outcomes of health research.

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	1.1 Open Research	1.1.1 Open Operating Grants Program	
Knowle dge		1.1.2 Randomized Controlled Trials	
		1.1.3 Team Grants Program	
	1.2 Strategic Priority	1.2.1 Strategic Priority Operating Grants Program	
	Research	Research	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 Acti	vity: 1.′	1 Open	Research				
2008-09 Fir	nancial Re	sources	(\$ millions)	2008-09	Human Reso	urces	(FTEs)
Planned Spending	To Autho		Actual Spending	Planned	Actual		Difference
\$ 462.6	\$ 47	70.9	\$ 493.9	228	205		23
Expected Results Excellent health res		nducted re	esponding to best re	searcher ideas, throu	ugh effective fu	unding	g programs
Performance Inc Success of CIHR re programs including	esearch results,	Target 1. Eva resu	luated programs der ılts.	monstrate effectiven	ess and		ormance Status Mostly Met
awareness and sat levels.	isfaction		ntain or increase the mitted per \$ of fundi		ons	2. 1	Met All

#### **Performance Summary**

- 1. 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.

2. 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 Proportion of overall expenditures from CIHR grants budget	Target 45% of overall grants budget	Performance Status Exceeded
--	-------------------------------------	--------------------------------

#### **Performance Summary**

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

Program Act	ivity: 1.2 Strate	gic Priority F	Research		
2008-09 Financ	ial Resources (\$ r	nillions)	2008-09 Human	Resources (FTE	s)
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 Success of CIHR research programs including results,	Target 1. Evaluated programs demonstrate effectiveness and results.	Performance Status 1. Mostly Met
awareness, satisfaction levels, and appropriateness of priorities	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:
  - A major evaluation of the <u>HIV/AIDS Community-based Research Program</u> 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 <u>Pandemic Preparedness Strategic Research Initiative</u> (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 Proportion of overall expenditures from CIHR grants budget	<b>Target</b> 9% of overall grants budget	Performance Status 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 though 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	2.1 Researchers and Trainees	2.1.1 Salary Support Programs
health research community with the		2.1.2 Training Support Programs
capacity to undertake		2.1.3 Canada Research Chairs Grants
health research		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	2.3.1 Institute Support Grants
	Partnerships	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 Acti	vity: 2.1 Rese	archers and T	rainees			
2008-09 Financial	Resources (\$ milli	ions)	2008-09 Human R	esources (	FTEs)	
Planned Spending	Total Authorities	Actual Spending	Planned	Actu	ıal	Difference
\$196.1	\$ 198.2	\$ 188.9	97	78		19
			es is available to cond	luct excelle	nt resea	rch in areas of
Performance Indicutes Success of CIHR-f training programs in awareness, satisfa	unded salary and ncluding results,	Target 1. Evaluations o effectiveness	f programs demonstr and results.	ate		mance Status ostly Met
appropriateness of opportunities development	funding		crease the number oubmitted per \$ of fun	=	2. Ex	ceeded
Performance Sum	ımarv	1			1	

#### Performance Summary

- 1. Evaluated programs demonstrate effectiveness and results through the following examples:
  - 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 <u>Strategic Training Initiatives in Health Research</u> (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 <u>fifth-year evaluation of the Canada Research Chairs Program</u> 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 spo	ent compared to a target of 19%	

vity: 2.2 Resea	arch Resourc	es and Collabo	ration		
Resources (\$ milli	ons)	2008-09 Human R	esources (l	FTEs)	
Total Authorities	Actual Spending	Planned	Actu	al	Difference
\$ 52.0	\$ 58.9	25	24		1
ch resources are av	ailable for excellent	thealth research as a	a result of ef	fective f	unding programs
cator unded research aboration programs					mance Status ostly Met
wareness, and funding search resources.				2. Ex	ceeded
	Total Authorities \$ 52.0  ch resources are avecator unded research aboration programs wareness, and funding	Resources (\$ millions)  Total Actual Spending  \$ 52.0 \$ 58.9  Ch resources are available for excellent cator unded research aboration programs wareness, and funding  Actual Spending  Target  1. Evaluated profeficativeness  2. Maintain or in applications services.	Resources (\$ millions)  Total Authorities  \$ 52.0  \$ 58.9  Character  Cator  Unded research aboration programs wareness, and funding  Actual Spending  Planned  Plann	Total Authorities Spending  \$ 52.0 \$ 58.9 25 24  Ch resources are available for excellent health research as a result of effector and description programs wareness, and funding  Total Spending Planned Actual Planned Actual Planned	Resources (\$ millions)  Total Actual Planned Actual Spending  \$ 52.0 \$ 58.9 \$ 25 \$ 24  Ch resources are available for excellent health research as a result of effective for aboration programs wareness, and funding  Total Actual Planned Actual Pla

#### **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 funde	<u>ed</u> .	
Expected Results Appropriate resources available that er	nable adequate research resources	
Performance Indicator Proportion of fundable applications received by CIHR that are funded	<b>Target</b> 90% of fundable applications are funded	Performance Status Mostly Met
Performance Summary 84.9% of fundable applications were fu	nded 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%

2008-09 Financial	Resources (\$ mill	ions)	2008-09 Human F	lesources (	FTEs)	
Planned Spending	Total Authorities	Actual Spending	Planned	Actu	ıal	Difference
\$ 25.2	\$ 25.4	\$ 23.7	12	10		2
National and interna	ational health resea		rmulated and implen		increase	ed relevance and
quantity of research  Performance India  Success of CIHR-fu	ational health reseant is achieved as a recator unded partnership	Target 1. Evaluated pr	nces and partnership	S.	Perfor	ed relevance and mance Status omewhat Met
National and international and international and international particular and international and intern	ational health reseant is achieved as a recator unded partnership including results,	esult of strong allia	nces and partnership	S.	Perfor	mance Status

1. There has not been a recent evaluation of the program. However, reports from program managers, researchers and partners for the <u>Human Frontier Science Program (HFSP)</u>, the <u>Regional Partnership Program</u> and the <u>Small Health Organizations Partnership Program</u> are positive.

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.

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.

2. 6.0 applications were submitted per \$1M of funding available which was substantially the same as last year.

Performance Indicator Proportion of overall expenditures from CIHR grants budget	Target 2% of overall grants budget	Performance Status Met All
Performance Summary		

Performance Sun 2.4% of overall gra		nt compared to a targe	et of 2%			
Program Acti	ivity: 2.4 Ethic	al, Legal and So	ocial Issues (E	LSI)		
2008-09 Financial Resources (\$ millions) 2008-09 Human Resources (FTEs)						
Planned Spending	Total Authorities	Actual Spending	Planned	Actu	al	Difference
\$ 2.9	\$ 3.0	\$ 2.4	2	2		-
Expected Results Health research co		ally as a result of effect	tive funding program	าร		
Performance Indicator Outputs and impacts of funded research  Target 1. Evaluated programs demonstrate effectiveness and results.  Performance Status 1. Somewhat Met						
			ase the number of a of funding available.	pplications	2. Me	et All
Performance Sun	nmary				•	
There has not and partners a		ation of the program.	However, reports fr	om program	n manag	ers, researchers
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.						
2. 17.3 applications were submitted per \$1M of funding available which was approximately the same as last year.						
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  Met All						
Performance Sun	nmary					

#### **Benefits for Canadians**

0.2% of overall grants budget was spent which is the same as the target.

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 &	3.1 Knowledge	3.1.1 Knowledge Translation Programs		
Commercialization	Translation of Health Research	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 F	Resources (\$ millio	ns)	2008-09 Human Res	ources (FTEs	)		
Planned Spending	Total Authorities	Actual Spending	Planned	Actual	Difference		
\$ 40.8	\$ 43.6	\$ 41.5	20	17	3		
Expected Results Health research is tr	Expected Results Health research is translated more effectively as result of funding programs						
Performance Indicates Success of CIHR reincluding results, aw	search programs	Target 1. Evaluated programs demonstrate effectiveness and results.			Performance Status  1. Met All		
satisfaction levels.			Maintain or increase the number of applications submitted per \$ of funding		2. Met All		

#### **Performance Summary**

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

available.

- 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 Number, scope and diversity of knowledge translation activities supported by CIHR (and its partners, where relevant) or resulting from CIHR activities.	Target Maintain or increase the number, scope and diversity of KT activities.	Performance Status Mostly Met
Performance Summary <u>Diversity of research supported</u> : KT program resoncentrated in one main area in 2008-09.	search is supported across the mandates of	of all 13 institutes, but was
Performance Indicator Number and types of stakeholders as well as types of knowledge translation activities during the research process.	Target Maintain or increase number and types of stakeholders involved in KT.	Performance Status 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
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#### **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 Differe					
\$ 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					
		Maintain or inc applications po	2. Exceeded					

#### **Performance Summary**

1. There has not been a recent comprehensive evaluation of these programs however:

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.

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.

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.						
nce Indicator n of fundable applications by CIHR that are funded.	Target 55% of fundable applications are funded Exceeded	tatus				
nce Summary fundable applications were	ded, which is significantly higher than the target of 55%.					
n of overall expenditures R grants budget.	Target Status 3% of overall grants budget Met All					
R grants budget.	which was the same as the target.	Wet All				

#### **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.

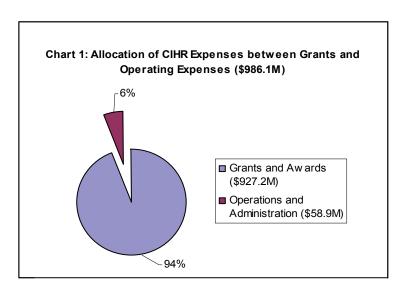
#### **Condensed Statement of Operations**

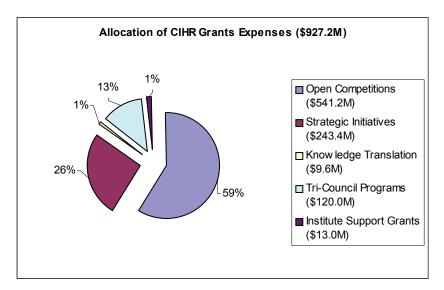
Grants and awards expenses decreased by \$28.9M (or 3.0%) in 2008-09 compared to 2007-08. The primary reason for this decrease is due to the fact that in 2007-08, CIHR recorded a one-time \$20M expense pertaining to a conditional grant (in the form of an endowment) awarded to the Gairdner Foundation 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 selfassembled 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

Table 6: Up-Front Multi-Year Funding

Table 10: Response to Parliamentary Committees and External Audits

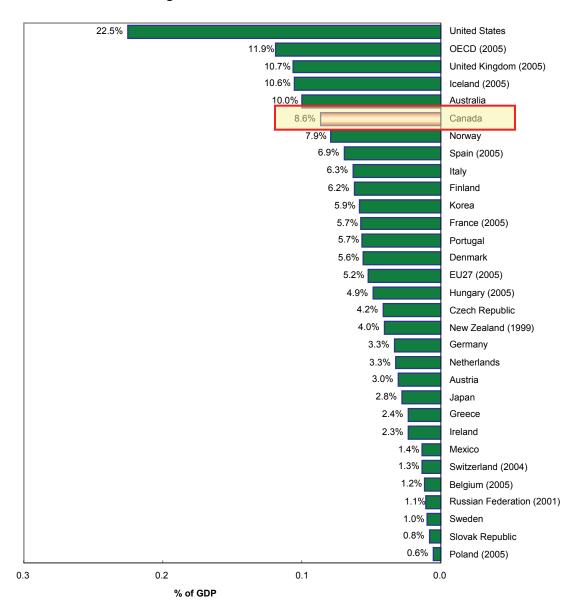
Table 11: Internal Audits & Evaluations

# Annex A - Health Related R&D Budget in Canada in 2006

Canada ranked fifth in international ratings of health related research and development (R&D) expenditures expressed as a percentage of Gross Domestic Product (GDP) as of 2006.

Note that the Canadian statistics for health related R&D expenditures comprises data from not only CIHR, but also from provincial governments, business enterprises, higher education, private and non-profit organizations and foreign investors.

#### Health Related R&D Budget in 2006<sup>1</sup>



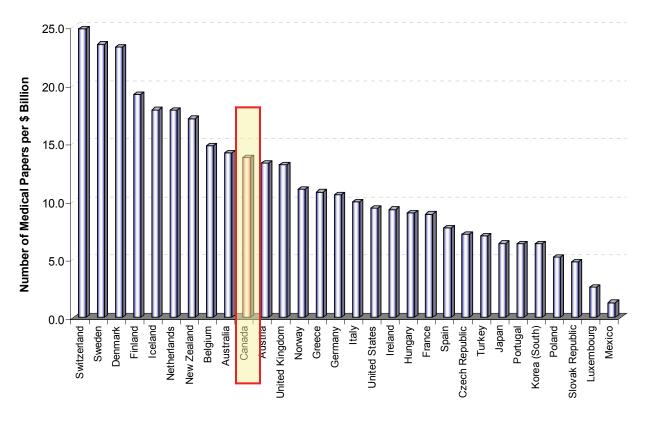
<sup>&</sup>lt;sup>1</sup> Source: OECD Science, Technology and Industry Scoreboard 2007 http://oberon.sourceoecd.org/vl=2819602/cl=36/nw=1/rpsv/sti2007/qa8-1.htm#1

# Annex B – Number of Canadian Publications in Medical Research and World Share

The number of publications is one of the key output indicators that show how well scientific research is performing. It measures the scientific productivity of researchers and is a primary method by which the results of research are translated into results for Canadians.

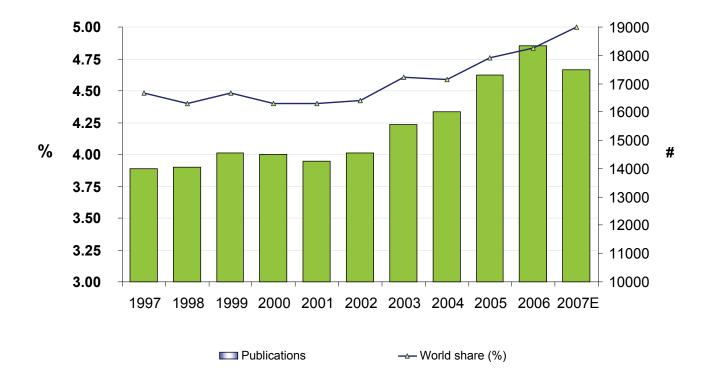
Canada is ranked tenth out of 30 OECD countries in 2007 in terms of number of papers in medical research per Billion dollars of Gross Domestic Product (GDP).

#### Number of Medical Papers per \$ Billion of GDP in the OECD Countries in 2007



The volume of published papers has significantly increased (28%) between 2002 and 2006. The Canadian share of total medical research publications produced in the world has increased slowly but surely reaching 5% in  $2007^1$ 

## Number of Papers in Medical Research Published by Canadian Investigators



<sup>&</sup>lt;sup>1</sup> Observatoire des sciences et des technologies, 2009 E: estimated

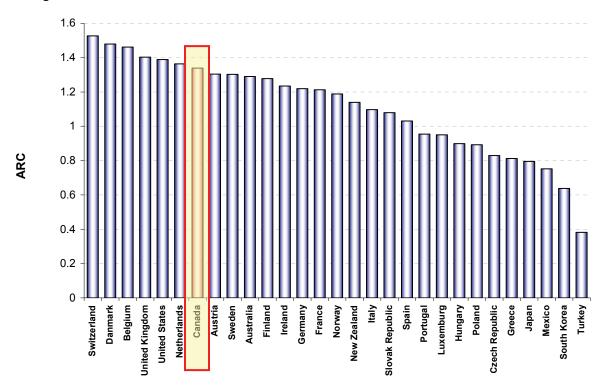
# Annex C - Average Relative Citation Factor (ARC) in Health Research in 2007

One of CIHR's performance indicators for Strategic Outcome #1 is that research or research agendas are informed by CIHR-funded research. A useful measure to determine this is the impact and quality of research that is funded by CIHR. In other words, the degree to which CIHR informs research agendas is the degree to which research publications are cited (because they have been found useful). Citations are a measure of the potential use of a researcher's work by fellow researchers and colleagues and so the more their work is cited, the greater the likelihood that there is higher value to the work.

A standardized measure of citations used internationally is called the Average Relative Citation Factor (ARC). The ARC score is calculated for every country in a particular field (in this case, medical research) and then normalized to 1.0. An ARC value above 1.0 for a country means that, on average, the country's publications in that field are cited more often than the world average. An ARC value below 1.0 would mean that a country's publications in a field are not cited as often as the world average.

The ARC value for Canadian publications in medical research is 1.34 when compared to the world average, with the result that Canada ranks 7<sup>th</sup> worldwide in 2007<sup>1</sup>. In 2002 Canada's ARC ranking in medical research was 13<sup>th</sup> with an ARC of 1.24.

#### **Average Relative Citation Factor**



<sup>&</sup>lt;sup>1</sup> Observatoire des sciences et des technologies (O ST), 2009

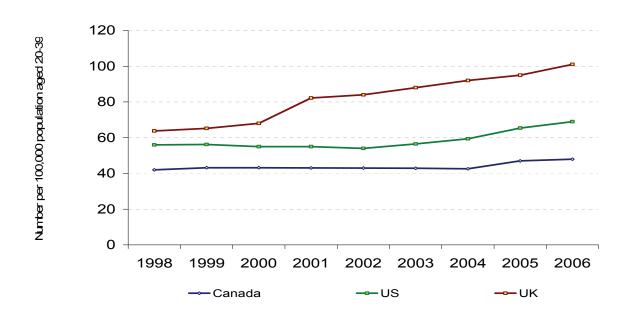
#### Annex D - PhD Graduates in Canada

Highly educated people are trained to conduct research and to be the vital resource for innovation. With their knowledge and skills acquired for long training years, doctorate holders are in a position to contribute significantly to Canada's economy and society. CIHR has different programs supporting the students and most of its PhD awards are 3 years in length.

The number of PhD graduates in Canada has been stable at a level of 42 per 100,000 population from 1998 to 2004. This increased by approximately 13% in 2005-06, reaching a maximum of 48 per 100,000 population. The trend in the health related fields<sup>1</sup> as of 2003 also shows a substantial increase.

Although CIHR is contributing to train approximately 60% of all PhD candidates, a recent study<sup>2</sup> shows that Canada consistently demonstrated a poor performance in the number of graduated PhD compared to OECD countries. It ranked next to last in 1998 as well as in 2006.

#### PhD Graduates in Canada



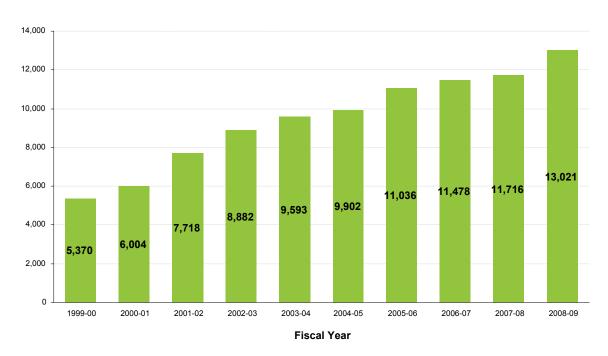
<sup>&</sup>lt;sup>1</sup> Statistics Canada, 2009 (special tabulations on earned doctorates in the fields of: biological and biomedical sciences, health professions and related clinical sciences, psychology, and dental, medical and veterinary residency programs)

Conference Board (2008): http://www.conferenceboard.ca/HCP/Details/education/Phd-graduates.aspx

# Annex E - Number of Health Researchers & Trainees Supported by CIHR

Since the inception of CIHR in 2000, the number of CIHR-supported health researchers and trainees has grown from 5,370 to over 13,000 in 2008-09.

## Number of Health Researchers and Trainees Supported by CIHR



# **Annex F - Diversity of Research Resources and Collaboration Grants**

Primary Institute		Grants / Awards Inded	CIHR Expenditures (in Thousands \$)		
	2008-09	2007-08	2008-09	2007-08	
Aboriginal Peoples' Health	10	8	1,786	1,908	
Aging	54	6	637	1,209	
Cancer Research	33	30	5,511	5,457	
Circulatory and Respiratory Health	31	9	1,813	1,611	
Gender and Health	12	8	1,411	1,958	
Genetics	46	26	3,190	4,278	
Health Services and Policy Research	44	7	2,504	1,238	
Human Development, Child and Youth Health	76	6	1,027	545	
Infection and Immunity	26	28	7,409	4,438	
Musculoskeletal Health and Arthritis	34	29	4,765	3,919	
Neurosciences, Mental Health and Addition	58	28	3,805	3,571	
Nutrition, Metabolism and Diabetes	44	6	4,186	1,153	
Population and Public Health	22	19	3,870	4,374	
Unable to allocate	358	210	14,083	13,780	
Total	848	420	55,997	49,438	

Primary Theme		Grants / Awards unded	CIHR Expenditures (in Thousands \$)		
	2008-09	2007-08	2008-09	2007-08	
Biomedical	158	113	11,530	14,977	
Clinical	42	27	12,924	6,413	
Health Systems / Services	37	20	6,018	3,946	
Social / Cultural / Environmental / Population	56	50	9,465	11,505	
Health					
Unable to allocate	555	555 210		12,598	
Total	848	420	55,997	49,438	

# **Annex G - Diversity of KT Grants**

Primary Institute	Number of Awards F		CIHR Expenditures (in Thousands \$)		
	2008-09	2007-08	2008-09	2007-08	
Aboriginal Peoples' Health	6	6	355	327	
Aging	4	7	255	434	
Cancer Research	2	4	134	304	
Circulatory and Respiratory Health	3	2	126	53	
Gender and Health	0	2	0	167	
Genetics	0	1	0	15	
Health Services and Policy Research	81	69	5,176	4,263	
Human Development, Child and Youth Health	7	3	553	200	
Infection and Immunity	0	1	0	9	
Musculoskeletal Health and Arthritis	2	5	62	187	
Neurosciences, Mental Health and Addiction	7	11	441	459	
Nutrition, Metabolism and Diabetes	3	3	192	196	
Population and Public Health	13	27	670	1,223	
Unable to allocate	173	51	3,311	1,670	
Total	301	192	11,274	9,507	

# Table 1: Sources of Respendable and Non-Respendable Revenue

# Non-Respendable Revenue (\$ millions)

			2008-09			
Program Activity	Actual 2006-07	Actual 2007-08	Main Estimates	Planned Revenue	Total Authorities	Actual
1.1. Open Research						
Refunds of Previous Years Expenditures	1.0	1.3	N/A	1.5	N/A	1.5
1.2. Strategic Priority Research						
Refunds of Previous Years Expenditures	0.3	0.4	N/A	0.4	N/A	0.4
2.1. Researchers and Trainees						
Refunds of Previous Years Expenditures	0.6	0.8	N/A	0.6	N/A	0.5
2.2. Research Resources and Collaboration	n					
Refunds of Previous Years Expenditures	0.2	0.2	N/A	0.1	N/A	0.2
2.3. National and International Partnership	S					
Refunds of Previous Years Expenditures	0.1	-	N/A	0.1	N/A	0.1
2.4. Ethical, Legal and Social Issues						
Refunds of Previous Years Expenditures	-	0.1	N/A	-	N/A	-
3.1. Knowledge Translation of Health Research						
Refunds of Previous Years Expenditures	0.1	0.2	N/A	0.1	N/A	0.1
3.2. Commercialization of Health Research						
Refunds of Previous Years Expenditures	0.1	0.1	N/A	0.1	N/A	0.1
Total Non-Respendable Revenue	2.4	3.1	N/A	2.9	N/A	2.9

# Table 5: Transfer Payment Programs<sup>6</sup>

#### 1. Grants for Research Projects and Personnel Support

Start date: October 2000

End date: N/A

#### **Description:**

CIHR provides a wide array of funding programs under this transfer payment program. This includes grants which provide support for the direct costs of health research projects and awards that provide support to individual health researchers and trainees. Infrastructure grants help create optimum environments for the conduct of health research. This includes funding for researcher networking and collaborative activities and grants to selected organizations such as the Canadian Council on Animal Care that facilitate the ethical conduct of research.

#### **Strategic Outcomes:**

1.0 Advances in Health Knowledge, 2.0 People and Research Capacity, 3.0 Knowledge Translation and Commercialization.

#### **Results Achieved:**

- 1. CIHR grants helped maintain a strong and diverse health research base, programs continue to demonstrate strong application pressure and an increase in the average cost of research projects was accommodated through internal reallocation of funding.
- 2. CIHR invested a significant portion of its grants budget to fund health research in areas of importance to Canadians, including funding clinical research, pandemic preparedness, HIV/AIDS, cancer, regenerative medicine and Hepatitis C.
- 3. CIHR supported in excess of 13,000 researchers and trainees in all domains of health research.
- 4. CIHR worked in partnership with small and medium enterprises as well as multi-national pharmaceutical companies to support pre-competitive R&D programs; CIHR provided Research Synthesis grants, which helped researchers translate research findings into new products and services or policies and procedures for the benefit of Canadians.

#### **Program Activities:**

1.1 Open Research, 1.2 Strategic Priority Research, 2.1 Researchers and Trainees, 2.2 Research Resources and Collaboration, 2.3 National and International Partnerships, 2.4 Ethical, Legal and Social Issues, 3.1 Knowledge Translation of Health Research, 3.2 Commercialization of Health Research.

(\$ millions)	Actual Spending 2006-07	Actual Spending 2007-08	Planned Spending 2008-09	Total Authorities 2008-09	Actual Spending 2008-09	Variance(s)
Total Grants	\$ 776.6	\$ 826.3	\$ 849.3	\$ 879.3	\$ 879.0	\$ 0.3
<b>Total Contributions</b>	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Total Other types of transfer payments	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Total Program Activities	\$ 776.6	\$ 826.3	\$ 849.3	\$ 879.3	\$ 879.0	\$ 0.3

Comment(s) on Variance(s): Variance between authorities and actual spending is not significant.

#### Audit completed or planned:

- 1. Audit of the Financial Administration of Open Operating Grants. (Completed November 2008)
- 2. Audit of the Non-Financial Administration of Open Operating Grants (Completed March 2009)
- 3. Audit of Salary and Training Awards (Planned 2009-10)
- 4. Audit of a Research-Related Activity Program (Planned 2011-12)

<sup>&</sup>lt;sup>6</sup> the amounts only include grant programs where expenditures exceed \$5 million

#### 2. Canada Graduate Scholarships

**Start date: 2003-04** 

End date: N/A

#### **Description:**

The Canada Graduate Scholarships (CGS) Program provides financial support to develop future researchers at both the Masters and Doctoral levels. The CGS is a tri-council program with CIHR responsible for administering that portion of the program that is directed at students pursuing health related studies.

Strategic Outcomes: 2.0 People and Research Capacity

#### **Results Achieved:**

In 2008-09 CIHR funded over 900 outstanding Master's and Doctoral students through the CGS Program. With the creation of these awards in Budget 2003, and with recent additional investments in the CGS Master's and Doctoral awards in Budgets 2007 and 2009, the federal government has ensured that Canada can offer world-class support that will help to attract and retain the best research students in Canada.

**Program Activities:** 2.1 Researchers and Trainees

(\$ millions)	Actual Spending 2006-07	Actual Spending 2007-08	Planned Spending 2008-09	Total Authorities 2008-09	Actual Spending 2008-09	Variance(s)
Total Grants	\$ 10.1	\$ 13.9	\$ 18.9	\$ 19.2	\$ 18.7	\$ 0.5
Total Contributions	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Total Other types of transfer payments	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Total Program Activities	\$ 10.1	\$ 13.9	\$ 18.9	\$ 19.2	\$ 18.7	\$ 0.5

Comment(s) on Variance(s): Variance between authorities and actual spending is not significant.

Audit completed or planned:
N/A

#### 3. Institute Support Grants

Start date: October 2000

End date: N/A

#### **Description**

The Institute Support Grant (ISG) Program provides funding to select Canadian academic institutions, including universities and teaching hospitals, to assist them in hosting the 13 Institutes of CIHR. The Institutes help CIHR maintain strong ties to Canada's research communities and to understand their needs. Each CIHR-appointed Institute Scientific Director is among the top scientists in his/her field and helps CIHR define its strategic health research priorities and develop research partnerships with other interested parties.

Strategic Outcomes: 2.0 People and Research Capacity

#### **Results Achieved**

In 2008-09 CIHR provided each of its 13 virtual Institutes with a \$1M grant, paid to the Institutes' host institutions for the establishment and management of an Institute Office, from which the CIHR-appointed Scientific Director along with host institution-based staff plans and executes the operations and activities of their Institute. These activities include facilitating and developing national research networks linking the Institutes' respective research communities.

**Program Activities:** 2.3 National and International Partnerships

(\$ millions)	Actual Spending 2006-07	Actual Spending 2007-08	Planned Spending 2008-09	Total Authorities 2008-09	Actual Spending 2008-09	Variance(s)
Total Grants	\$ 13.0	\$ 13.0	\$ 13.0	\$ 13.0	\$ 13.0	\$ -
Total Contributions	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Total Other types of transfer payments	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Total Program Activities	\$ 13.0	\$ 13.0	\$ 13.0	\$ 13.0	\$ 13.0	\$ -
Comment(s) on Variance Audit completed or plant						

N/A

# Table 6: Up-Front Multi-Year Funding

Name of Recipient: The Gairdner Foundation

Start Date: March 28, 2008

End Date: March 31, 2028

**Total Funding:** \$20,000,000

**Description:** CIHR provided the Gairdner Foundation with a \$20M grant in the form of an endowment to promote exceptional achievement in health research. In recognition of the significant endowment from the Government of Canada, the Gairdner Foundation renamed its awards as the "Canada Gairdner International Awards", helping to brand Canada internationally as a global leader in health research.

Strategic Outcome(s): 2.0 People and Research Capacity

**Summary of Results Achieved by the Recipient:** The first six Canada Gairdner International Awards (valued at \$100,000 each) and the first ever Canada Gairdner Global Health Award (valued at \$100,000) were issued to outstanding health researchers during the 2008-09 fiscal year.

# Program Activity: 2.1 Researchers and Trainees (\$ millions)

Actual	Actual	Planned	Total	Actual	Variance(s)
Spending	Spending	Spending	Authorities	Spending	
2006-07	2007-08	2008-09	2008-09	2008-09	
\$ -	\$ 20.0	\$ -	\$ -	\$ -	\$ -

Comments on Variance(s): N/A

Significant Evaluation findings by the recipient during the reporting year and future plan:

N/A

Significant Audit findings by the recipient during the reporting year and future plan:

N/A

URL to Recipient's Site: http://www.gairdner.org/

# **Table 10: Response to Parliamentary Committees and External Audits**

#### **Response to Parliamentary Committees**

No recommendations.

# Response to the Auditor General (including to the Commissioner of the Environment and Sustainable Development)

http://www.oag-bvg.gc.ca/internet/English/parl oag 200905 03 e 32516.html

2009 Spring Report of the Auditor General of Canada

Chapter 3—Health and Safety in Federal Office Buildings

3.80 Departments should ensure that fire safety plans are prepared and administered in accordance with established federal legislation and Treasury Board policies and standards.

CIHR agrees with the recommendation and will work with its landlord, within the constraints of the terms of its lease, to ensure that the building's fire safety plans meet these requirements.

3.88 Departments should ensure that all evacuation drills are held as required by federal legislation and Treasury Board policies and standards.

CIHR agrees with the recommendation and will work with its landlord, within the constraints of the terms of its lease, to ensure that drills are held as required.

3.93 Departments should ensure that building fire emergency organizations are established and administered as required by federal legislation and Treasury Board policies and standards.

CIHR agrees. As the largest federal tenant in its building, CIHR currently administers the fire emergency organizations for all federal tenants.

External Audits (Note: These refer to other external audits conducted by the Public Service Commission of Canada or the Office of the Commissioner of Official Languages)

N/A

# Table 11: Internal Audits and Evaluations

Table 11a: Internal Audits								
Name of Internal Audit	Audit Type	Status	Completion Date					
Audit of Confidentiality, Integrity, and Availability of Financial Information	Financial Management Controls	Completed	February 2009					
Audit of the Integrity of Information in the Departmental Performance Report (DPR).	Management Reporting	Deferred	Deferred because of the RPP audit results of 2007-08, concluding that the process for developing CIHR's RPP is well controlled overall.					
Audit of the Financial Administration of Open Operating Grants.	Transfer Payment	Completed	November 2008					
Audit of the Non- Financial Administration of Open Operating Grants	Transfer Payment	Completed	March 2009					
Audit of the Management Control Framework for Research Ethics	Management Controls	Completed	March 2009					

Table 11b: Evaluations								
Name of Evaluation	Program Activity	Evaluation Type	Status	Completion Date				
Strategic Training Initiative In Health Research (STIHR)	2.1 Researchers and Trainees	Summative	Completed	August 2008				
Evaluation of the Intellectual Property Mobilization (IPM) Program	3.2 Commercialization of Health Research	Summative	Completed	April 2008				
Canada Graduate Scholarships (CGS) Program and Related Programs Review	2.1 Researchers and Trainees	Summative	Completed	January 2009				
Panel and Secretariat on Research Ethics (PRE/SRE)	2.4 Ethical, Legal and Social Issues	Summative	Completed	March 2009				