

ESTIMATES

Canadian Institutes of Health Research

Performance Report

For the period ending March 31, 2002

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The Estimates Documents

Each year, the government prepares Estimates in support of its request to Parliament for authority to spend public monies. This request is formalized through the tabling of appropriation bills in Parliament.

The Estimates of the Government of Canada are structured in several parts. Beginning with an overview of total government spending in Part I, the documents become increasingly more specific. Part II outlines spending according to departments, agencies and programs and contains the proposed wording of the conditions governing spending which Parliament will be asked to approve.

The *Report on Plans and Priorities* provides additional detail on each department and its programs primarily in terms of more strategically oriented planning and results information with a focus on outcomes.

The *Departmental Performance Report* provides a focus on results-based accountability by reporting on accomplishments achieved against the performance expectations and results commitments as set out in the spring *Report on Plans and Priorities*.

The Estimates, along with the Minister of Finance's Budget, reflect the government's annual budget planning and resource allocation priorities. In combination with the subsequent reporting of financial results in the Public Accounts and of accomplishments achieved in Departmental Performance Reports, this material helps Parliament hold the government to account for the allocation and management of funds.

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Foreword

In the spring of 2000, the President of the Treasury Board tabled in Parliament the document "Results for Canadians: A Management Framework for the Government of Canada". This document sets a clear agenda for improving and modernising management practices in federal departments and agencies.

Four key management commitments form the basis for this vision of how the Government will deliver their services and benefits to Canadians in the new millennium. In this vision, departments and agencies recognise that they exist to serve Canadians and that a "citizen focus" shapes all activities, programs and services. This vision commits the Government of Canada to manage its business by the highest public service values. Responsible spending means spending wisely on the things that matter to Canadians. And finally, this vision sets a clear focus on results – the impact and effects of programs.

Departmental performance reports play a key role in the cycle of planning, monitoring, evaluating, and reporting of results through ministers to Parliament and citizens. Departments and agencies are encouraged to prepare their reports following certain principles. Based on these principles, an effective report provides a coherent and balanced picture of performance that is brief and to the point. It focuses on outcomes - benefits to Canadians and Canadian society - and describes the contribution the organisation has made toward those outcomes. It sets the department's performance in context and discusses risks and challenges faced by the organisation in delivering its commitments. The report also associates performance with earlier commitments as well as achievements realised in partnership with other governmental and non-governmental organisations. Supporting the need for responsible spending, it links resources to results. Finally, the report is credible because it substantiates the performance information with appropriate methodologies and relevant data.

In performance reports, departments and agencies strive to respond to the ongoing and evolving information needs of parliamentarians and Canadians. The input of parliamentarians and other readers can do much to improve these reports over time. The reader is encouraged to assess the performance of the organisation according to the principles outlined above, and provide comments to the department or agency that will help it in the next cycle of planning and reporting.

Comments or questions can be directed to:

Results-based Management Directorate Treasury Board of Canada Secretariat L'Esplanade Laurier Ottawa, Ontario K1A OR5

OR to this Internet address: rma-mrr@tbs-sct.gc.ca

This report is accessible electronically from the Treasury Board of Canada Secretariat Internet site: <u>http://www.tbs-sct.gc.ca/rma/dpr/dpre.asp</u>



Canadian Institutes of Health Research

Instituts de recherche en santé du Canada

Performance Report

for the period April 1, 2001 to March 31, 2002

Submitted to Parliament by

Minister of Health





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CIHR at a Glance

Type of organization	Federal Research Agency
Activities	Leadership on national health research issues
Addivideo	 National health research agenda setting
	 Identification of scientifically excellent research proposals
	— · · · · · · · · · · · · · · · · · ·
	 Facilitating the translation and use of new knowledge for health and economic benefit
Business Line	 Health research – the creation and translation of new
	knowledge for improving health.
Key component of	Canada's Innovation Strategy
	National Health Agenda
Reporting to Parliament	through the Minister of Health
Governed by	 A Council of 20 Canadians appointed by Order in Council
Led by	President, Alan Bernstein, PhD, OC, FRSC
Administered by	• Staff of 197 in the National Capital Region plus 48 in Institutes
_	across Canada
Structure	Thirteen Institutes that establish research priorities and
	develop initiatives in specific health areas
	 A central secretariat offering a wide portfolio of grants and
	awards to ensure a broad national research capacity
Appropriations	 \$553.8 million
2001-2002	that includes:
	 \$24.8 million for Networks of Centres of Excellence
	 \$21.2 million for Canada Research Chairs
Partnering	 Very extensive, national and international
	 With federal organizations, provinces, voluntary health
	organizations, universities, hospitals, research centres,
	biotechnology, pharmaceutical and other health-related
	industries
Accomplishments	 Formation of 13 CIHR Institutes and Advisory Boards
since launching	 Consensual cross-Canada development of Institute research
in June 2000	agendas and strategies
	 Over 30 initiatives launched by Institutes and partners
	 Funding the projects of nearly 6,000 health researchers across Canada
	 Supporting the training of an estimated 5,000 students and
	postdoctoral fellows
	• Scale of the average CIHR operating research grant has been
	expanded by 26.5% (from \$80,700 in 1999-2000 to \$102,100
	in 2001-2002)
	 Identified four strategic directions for health research
	Guidance on stem cell research by CIHR-funded researchers
	Leadership in privacy issues as they relate to health research
	Organizational design for modern management
Core values and beliefs	Teamwork and interdisciplinary cooperation
	 Openness, inclusiveness and public engagement
	Innovative thinking
	Multidimensional view of health
	Pursuit of excellence

2001-2002 Highlights- Outstanding Research 2001-2002 Highlights - Research into	 In 2001-2002, Canadian health researchers: showed that adult stem cells, that is, cells which can be induced to develop into a diverse array of cell types, are found in skin tissue; discovered that a common acne medication can reduce certain kinds of cancer tumours by 70%; cured diabetes in animals by stimulating the body to develop new insulin producing cells; made important advances in understanding population health and providing the knowledge base for health policy; found that a naturally occurring protein can reduce the level of HIV lying dormant in animal cells; developed a vaccine that triggers immunity to HIV in the mucosal system, the front-line barrier to sexually transmitted diseases; showed how to suppress an overactive enzyme that contributes to clogged arteries and premature death in people with diabetes; discovered a genetic mechanism that could lead to an entirely new approach to controlling pain; and, pioneered approaches to discerning interactions between proteins in living cells – a key to the new science of proteonomics.
	 the extent of ankle, knee and head injuries; a finding that the pain-killing effects of opioids can be enhanced by the addition of small amounts of opioid antagonists - this finding should enable lower dosages of pain-killers, fewer side effects for patients and reduced drug costs; a simple treatment for anaemia that could mean a sharp increase in quality of life for up to 60% of cancer patients; more precise measures of the immune status of persons with HIV/AIDS allow much better tailoring of drug delivery – this means fewer side effects and also a reduction in the estimated
	 annual expenditure of \$10,000 per patient for anti HIV drugs; and, a vaccine to eliminate a dangerous form of E-Coli from cows.

Message from the President

2001-2002 was an exciting year at CIHR. I am delighted by our tremendous achievements in building for a healthier Canada.

When CIHR was created, we set out to establish—for the first time—a national health research agenda that responds to the needs and priorities of Canadians. We achieved that goal this past year through r:*evolution*, a document that identifies four overarching strategic directions for health research in the coming years.

Building momentum

The year 2001-02 also represents the historic first year that CIHR and Canada have had 13 virtual health research institutes. Scientific Directors and their Institute Advisory Boards worked together to develop strategic plans and contribute to the development of a national health research agenda.

The institutes held hundreds of meetings and workshops across Canada to determine the research priorities of individuals and organizations throughout the health research community. As many participants told me, these consultations were the first occasions on which researchers, practitioners, volunteer organizations, industry and patients had gathered together to set priorities.

Turning research into action

Seeking to ensure that Canadians receive value from the research they fund, CIHR supports not only new discoveries, but also the application of research findings. New initiatives this past year included Proof of Principle and Intellectual Property Management Programs—both of which help Canadian researchers translate their discoveries into new products and services that improve the health of Canadians and the competitiveness of our economy.

We also continued our efforts to support the health researchers of tomorrow. CIHR's new Strategic Training Initiative is an outstanding example of the CIHR vision: multidisciplinary, strategic, inclusive and integrative, engaging partners and built on excellence and impact.

This year, CIHR also began a process to change our organizational structure and better reflect our broad, integrative mandate.

In 2001-2002, stem cells occupied the minds of researchers and policymakers alike, as Canadians grappled with the ethical questions of whether and how to advance promising research in this area while respecting Canadian values and beliefs. The guidelines adopted by CIHR for stem cell research will be consistent with the government's proposed legislation on assisted human reproduction.

Recognizing achievement

Our success is being recognized around the world through new international agreements, and through visits by representatives of foreign health research organizations eager to learn about CIHR's innovative approach.

It was also recognized by the Government of Canada, which increased our 2002-2003 budget by \$75 million. This is a significant increase, and a true measure of the government's support both for health research and for CIHR.

Canadian researchers made major advances in the past year—in proteomics, cardiovascular disease, stem cells, population health and many other areas. None of our achievements would have been possible without the efforts of hundreds of people—particularly those from voluntary health organizations—who have willingly given of their time, knowledge and expertise.

Going forward, CIHR intends to accelerate the pace of discovery, ensuring Canadians reap the benefits of a sound investment in health research.

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

Strategic Context

About the Canadian Institutes of Health Research

CIHR is a federal agency in the business of enabling Canadian health discoveries and putting them to use to improve quality of life. We aim to excel, according to international standards of scientific excellence, in the creation of new knowledge and its translation into improved health, more effective health services and products, and a strengthened Canadian health care system.

We lead a shared setting of national health research priorities and the development of consensus on current research issues. And we have the capacity to identify scientifically excellent research using a world-class expert review system.

Through research grants and awards, CIHR enables a broad spectrum of excellent Canadian research that will improve our capacity to understand life processes, maintain good health, avoid illness, and deliver high quality health care services.

We support the training and development of excellent Canadian health researchers throughout all stages of their careers.

With partner organizations in government, in the provinces and territories, the not-forprofit sector and private industry, our agency works to effectively address national challenges such as aboriginal health, HIV/AIDS, foetal alcohol syndrome, tobacco, environmental health, diabetes, child health, arthritis, breast cancer, health of the aged and spinal cord injuries.

CIHR facilitates innovation, working to help translate discoveries into better health policies, services and products – and a better health care system.

And we aspire to be a model of a modern, ethical, and highly effective federal organization that adds value to the Canadian health research enterprise.

Making a difference for Canadians

Through CIHR, Canadians support the continuing quest for new and better ways of getting healthy, being healthy, and staying healthy. Improved quality of life is the main expected benefit of health research. Other important benefits include:

- the recognition that Canadian society values intellectual endeavour and that we are playing a major role in the global effort to eradicate disease and promote good health;
- increased efficiency in our use of health system resources;

- economic gains through spin-off companies created to produce new products and processes that have been inspired and enabled by research findings, and through the business and employment they generate;
- awareness that our children are growing up in a country where they can be inspired by some of the best research minds anywhere; and,
- an instilling of a culture of innovation and evidence-based decision-making within our health care system.

Through our Institutes, we add value for Canadians by focusing attention on the health issues that matter most. With partners we are determining what research would make a difference, getting that research done and turning research results into action.

Through CIHR, the federal government has increased markedly the breadth, scale and use of health research - a key component of national strategies for health and innovation.

Alignment with national priorities

Canada is committed to being one of the healthiest, most innovative countries in the world. CIHR is a critical component of both a National Health Research Agenda and Canada's Innovation Strategy.

CIHR is an element of the National Health Agenda

In September 2000, Canada's First Ministers established as key goals of our health system: to preserve, protect and improve the health of Canadians, to ensure that Canadians have timely access to an appropriate, integrated and effective range of health services anywhere in Canada, based on their needs, not on their ability to pay; and to ensure the system's long-term sustainability so that health care services are available when needed by Canadians in future. Health research will provide the evidence base necessary for realization of each of these objectives.

CIHR and its partners are identifying and supporting the research required for an informed approach to meeting these broad objectives by responding to specific Canadian health challenges:

- improving the health status of our aboriginal peoples;
- ensuring healthy development of children and youth;
- addressing the particular health issues that face women, men and seniors;
- effectively using information and communication technologies to share information about health status and best practices;
- improving all aspects of our health system and policies: reforming our approach to primary care, improving the supply and distribution of health care professionals, keeping equipment and infrastructure up to date, increasing

efficiency in the use of medicines and services, and generally monitoring the system's performance more closely;

- developing more effective and less invasive treatments for cancer, arthritis, heart malfunctions, breathing problems, HIV/AIDS and other infectious diseases, addictions and mental disorders; and,
- promoting healthful living and the attainment of wellness.

CIHR is an enabler of Canada's Innovation Strategy

CIHR is an essential component of Canada's Innovation Strategy. Our enabling Act is based on the premise that knowledge is a strategic Canadian asset. We are in the business of achieving national excellence in innovation through investing in people, knowledge, and opportunity.

We are the focal point of a consensual, national effort to strengthen Canadian health science and research capacity, in particular university and hospital-based research. We have a mandate to ensure that new health knowledge is put to work to improve quality of life. In promoting the translation of health research findings into Canadian innovation we work with users of health knowledge - hospitals, clinicians, biotechnology firms, policy makers and others - to ensure that Canada receives the health and economic benefits that research may offer.

CIHR is helping to brand Canada as a location of choice for health researchers, recognized worldwide as a place of excellence, learning, and innovation. We are investing in the intellectual and entrepreneurial talent of our citizens. Through the many thousands of research projects that it supports, CIHR is creating a rich and multi-disciplinary learning environment from which future generations of Canadian researchers will emerge.

Our strategies for delivering results

The CIHR is expanding both the scope and the depth of the Canada's health research activities.

CIHR's extensive portfolio of open programs provide broad coverage of all areas of health research, from the study of molecular events underlying normal and disease processes to the study of national health care policies. Our research grants and scholarships are awarded competitively to health researchers and research trainees in universities, hospitals and research centres across the country. This essential programming contributes to a broad capacity for health innovation.

Our open programming covers:

- Research project support;
- Health researcher salary awards;
- Research training awards; and,
- Other health research and translation support.

CIHR's thirteen Institutes focus on the specific health priorities for particular groups of Canadians, on the health challenges posed by particular diseases, or on the health opportunities offered by improvement to policy services and behaviours. They bring stakeholders together to identify research priorities and then develop strategic initiatives to seek solutions through the creation or application of new knowledge.

The thirteen (13) CIHR Institutes cover:

- Aboriginal peoples' health;
- Cancer research;
- Circulatory and respiratory health;
- Gender and health;
- Genetics;
- Health services and policy research;
- Aging;
- Human development and child and youth health;
- Infection and immunity;
- Neurosciences, mental health, and addiction;
- Musculoskeletal health and arthritis;
- Nutrition, metabolism, and diabetes; and,
- Population and public health.

For more information on CIHR programming strategy, visit <u>http://www.cihr.ca</u>. There are sub-links to each Institute for information about their specific strategies.

CIHR is driven by the following **key principles**:

- Maintain a holistic view of health;
- Unite partners from all sectors in the identification of national priorities and the funding of research;
- Bring a multitude of disciplinary perspectives to the task of solving health questions; and,
- Provide national leadership and an international presence for health research, ethics, and other research issues.

To give broad direction to a national approach to creating and innovating with new health knowledge, CIHR has identified **four strategic foci**:

• Build Canada's international leadership through national excellence in health research;

- Integrate the biomedical, clinical, natural and social sciences, engineering, mathematics, and the humanities as critical elements of the health research enterprise;
- Improve the health status of vulnerable populations; and,
- Strengthen health research and the health care system to respond to rapid, continuing advances in genomics.

Our governance and management of risk

CIHR reports to Parliament through the Minister of Health. The agency is governed by a Board of twenty (20) Canadians who have been appointed by Order in Council. Our President chairs the Governing Council.

The Governing Council operates with advice from Standing Committees on:

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

As senior officer of the organization, the President receives advice from thirteen (13) Scientific Directors (the heads of the Institutes) and four Vice Presidents responsible for:

- Research;
- Knowledge Translation and Partnerships;
- Corporate Affairs; and,
- Services and Operations.

Many staff committees, such as a Research Planning and Priorities Committee, provide advice and help to ensure coordination of agency efforts and activities.

As part of its commitment to modern comptrollership, the agency has assessed risks and ensured that risk reduction strategies are in place. The assessment identified three areas of risk:

• Many grants made by CIHR today require funding for a subsequent three to five years. CIHR thus runs the risk of making forward commitments that reduce its flexibility to respond with new initiatives to meet unforeseen emerging health threats or opportunities. This risk is being mitigated by carefully balancing the costs of program decisions with expected federal funding in those years;

- Our grants and awards cover a wide range of health and social issues, scientific debates and new technologies. There is a persistent risk of funding research that does not fully reflect Canadian values. A system of Research Ethics Boards established across the country enables screening of proposals before they are funded by CIHR. We are looking towards further improvements to ensure uniform standards of review by the many different Review Boards. We also have an Ethics Unit within the organization, a designated ethics representative on each Institute Advisory Board and have led the development of a inter-agency panel on research ethics; and,
- There are risks related to operating a new organization with a developing staff capacity. An Organizational Design Project, now in the implementation phase, has helped the agency address this risk.

Resources Used

Parliamentary appropriations

In fiscal year 2001-2002, Parliament voted appropriations for CIHR totalling \$553.8 million. This included \$24.8 million for Networks of Centres of Excellence in the health area and \$21.2 million for Canada Research Chairs in health. Expenditures of the appropriations totalled \$524.1 million.

The vast majority of this public funding was delivered as grants and scholarships to enable research. We expended 5.5 % (\$29.6 million) to operate the agency.

To put these expenditures in an international context:

- The appropriations for CIHR represent a contribution of \$18.46 per Canadian. In the United States, federal expenditures on CIHR's counterpart, the National Institutes of Health (NIH), represent an expenditure of \$81.35 per US citizen; and,
- The appropriation for CIHR is approximately 0.54% of Canada's \$102.5 billion expenditure on health care. In the U.S., expenditures on the NIH are approximately 1.9% of national health expenditures.

Details of CIHR expenditures are published in our 2001-2002 Annual Report, audited by the Auditor General's Office. The Report will be available at our website upon publication (www.cihr.ca). In overview, the appropriation for the Canadian Institutes of Health Research was spent as follows:

Research grants	\$360.9 million
Researcher salary programs	\$35.1 million
• Training of researchers	\$39.5 million
Institute support grants	\$13.0 million
• Networks of Centres of Excellence	\$24.8 million
Canada Research Chairs	\$21.2 million
Program Delivery	\$29.6 million

CIHR lapsed some of the funding from the Grants and Awards and Operating appropriations for 2001-2002. An explanation is provided in the Management Discussion and Analysis section of the CIHR Annual Report that will be posted at our web site.

CIHR's human resources

In 2001-2002, CIHR engaged 245 people to deliver its programming. Of these, 197 (representing 175 full time equivalents) were federal government employees based in the National Capital Region. The remaining 48 were based in the offices of the thirteen institutes - currently in British Columbia (3), Alberta (2), Ontario (5), and Quebec (3) - and were paid through our Institute Support Grant.

More than 900 experts from the world health research community, primarily Canadians, voluntarily conducted the review of grant and awards applications submitted to CIHR. Each freely contributed many hours of their time (we estimate an average of 100 to 150 hours per committee member) to ensure that public resources are invested in the most promising health research projects.

Each of the thirteen (13) Institutes is supported by an Advisory Board. Two hundred and twelve (212) people representing a wide range of interests, but sharing an interest in improving health, voluntarily served as board members in 2001-2002.

Partnering for greater impact

CIHR is at the centre of a broad network of partnerships that spans the federal government, provincial and territorial governments, universities, hospitals and associated research centres, not-for-profit health agencies, biotechnology firms, pharmaceutical companies and other health-related industry.

Federal partners. The Canada Foundation for Innovation is refurbishing essential research infrastructure in all areas, thus helping to create a state-of-the-art health research environment in institutions across Canada. Simultaneously, through its Canada Research Chairs program, government is enlarging and strengthening the pool of Canadian health researchers, aiming for "brain gain", and complementing CIHR programming for the establishment of researchers through salary and grant funding. CIHR is closely linked to

the Social Sciences and Humanities Research Council, to the Natural Sciences and Engineering Research Council and to the National Research Council. Ongoing partnerships with Health Canada are helping to connect research and research results to health policies. And the agency is linked to the Canadian Health Services Research Foundation, Genome Canada and science-based departments or agencies across government. We are the major player in a coordinated delivery of federal programming for health innovation.

Provincial partners. Provincial departments and agencies fund approximately 7% of health research in Canada. CIHR works closely with health departments in the provinces and with provincial health research agencies, such as the Fonds de recherche en santé du Québec, the Alberta Heritage Foundation for Medical Research and the Michael Smith Foundation for Health Research in British Columbia.

Partnering with not-for-profit health organizations and charities. More than eighty non-profit health charities provide a significant contribution to health research in Canada, signalling Canadian's willingness to invest personal resources in the search for solutions to health challenges. At last count, these societies were contributing over 12% of funding for the national research effort. CIHR works closely with these voluntary sector partners, particularly in the training and developing of researchers who can address health priority areas. Combining forces with CIHR also allows health charities to participate in larger projects, where having a critical mass of researchers means deeper and faster searching for answers.

Partners in higher education. CIHR's partnering with universities and related research centres is fundamental to health research in this country. Universities provide much of Canada's infrastructure for research. They provide the salaries for many health researchers and the research space, services, intellectual environment and access to students.

Industry partners. Federal health research funding has been a critical factor behind the global leadership of Canada's biotechnology industry. Many biotech firms were spawned by ideas emanating from heath research. This has lead to a vast network of alliances among the CIHR community and biotechnology firms. CIHR also partners with many of the seventy-four (74) research-based pharmaceutical companies, helping connect them to academic researchers and scientifically excellent projects. We are expanding linkages with small and medium-sized health enterprises, many of which are the result of past Canadian health research discoveries.

Performance Discussion

Our commitment to Canadians

CIHR's commitment to Canadians is to achieve excellence in the creation of new knowledge, through research, and its translation into improved health for Canadians, through improved health services, better health products and a strengthened Canadian health care system.

As a results-based organization, we have developed a reporting framework for this commitment, structured around five outcome categories:

- 1) Support of outstanding, ethical and responsive Canadian health research;
- 2) Contribution to the building of a strong Canadian capacity for health research by training and supporting excellent researchers in a robust research environment;
- 3) Forging of partnerships on all aspects of health and engaging the Canadian public in the health research adventure;
- 4) Facilitating the translation, dissemination and use of research results to yield maximum benefits for Canadians; and,
- 5) Demonstrating organizational excellence through leadership, innovation, responsible management, continuous improvement and a quality work environment.

In our first year, from the creation of CIHR in June 2000 to March 2001, the organization focused on setting up the thirteen (13) Institutes and launching new programming that would increase partnering, inter-disciplinary research cooperation and use of results. By year-end, the Institutes were created, their Scientific Directors appointed and their Advisory Boards were established and ready for action.

In our second year, between April 2001 and March 2002, all 13 Institutes have focused on developing Strategic Plans, each reflecting broad consultation on national health research priorities. Our Institutes have commenced a first round of strategic research initiatives, 30 in all. Many address an immediate need to begin developing researcher expertise in specific areas, to create or enlarge networks or to establish databases. In cases where necessary Canadian expertise was already in place, Institutes have called for research proposals to address top priority health issues. During the year we also continued fine-tuning core programs to better fit with a broad definition of health and a mandate that includes knowledge translation. We redesigned our organizational structure to be what we believe is a prototype of the health research agency of the 21st century.

Delivering outstanding health research

Providing resources for the best possible Canadian research projects is essential to creating new knowledge that will make a difference. "Best possible" means scientifically rigorous. It means highly ethical and humane. And it means being relevant to the most critical, sometimes most difficult, questions about living organisms, societies and health.

Determining research priorities is an essential first step. In 2001-2002, all CIHR Institutes began broad consultations with stakeholders to develop consensus on top priority research needs. Specific information on these consultations is reported in the Institute Annual Reports, which will be posted on the CIHR web site (http://www.cihr.ca).

To provide a sense of the Canada-wide strategic planning processes undertaken by the 13 CIHR Institutes, here is a description of a stakeholder conference organized by one of them - the CIHR Institute of Musculoskeletal Health and Arthritis.

• At the first-ever Osteoarthritis Consensus Conference, physicians, persons with arthritis, scientists, and health policy makers united to begin forging a national osteoarthritis research strategy. The aim was to help eradicate the most crippling disease of Canada's aging population.

Organized by the CIHR Institute in partnership with the Arthritis Society and the Canadian Arthritis Network, the conference provided a forum for sharing the latest knowledge and establishing future research priorities.

Three million Canadians live with the debilitating and unrelenting pain of osteoarthritis. With nearly 10 million Canadians set to turn fifty in the next decade, advances into prevention and early detection have become critical. Economic impact studies indicate that the disease poses a burden of \$23 billion each year.

Important advances must be moved quickly into practice:

- Injecting a unique substance into the joint can enhance imaging and allow detection even before cartilage begins to erode;
- Measuring biomarkers (natural body substances that signal the presence of arthritis) to assess joint loss is faster than taking x-rays;
- Gene analysis could identify people at risk of osteoarthritis so that early monitoring can be set up;
- Studies reveal that many people are not even aware of the benefits of joint replacement; and,
- The use of regenerated cartilage tissue in arthritic has been successful in clinical trials and will be conducted in patients within the year.

CIHR Institutes and partners have moved quickly to develop and launch strategic initiatives in areas that stakeholder consultations have identified as national priorities. In 2001-2002, Institutes launched thirty (30) strategic initiatives. The list below indicates some of the areas in which these initiatives are stimulating increased research on health priorities:

- Innovative approaches to research on aboriginal people's health;
- Improving access to health services by marginalized groups;
- Interaction of genes and the environment on circulatory and respiratory health and disease;
- New emerging research teams;
- Trans-disciplinary programs for research in infection and immunity;
- A Canadian longitudinal study on aging;
- Child and youth health;
- Diabetes and mental illness in aboriginal populations;
- Foetal alcohol syndrome;
- HIV/AIDS;
- Injuries and accidents; and,
- Palliative care.

Cooperation between Institutes is generating exceptional synergy. Twelve (12) of the strategic initiatives were sponsored by more than one CIHR Institute.

External partners are also involved and contributing resources. For eight (8) initiatives, Institutes partnered with one or more external organizations. Partners included non-profit health charities (14), federal government departments and agencies (14) and industry (2).

More information on the specific projects supported through these initiatives are available through the CIHR website (<u>http://www.cihr.ca</u>).

The continual emergence of important research results indicates the high quality of research supported by CIHR. In 2001-2002 Canadian health researchers:

- Showed that adult stem cells, that is cells which can be induced to develop into a diverse array of cell types, are found in skin tissue;
- Discovered that a common acne medication can reduce certain kinds of cancer tumoursby 70%;
- Cured diabetes in animals by stimulating the body to develop new insulin producing cells;
- Made important advances in understanding population health and providing the knowledge base for health policy;
- Found that a naturally occurring protein can reduce the level of HIV lying dormant in animal cells;
- Developed a vaccine that triggers immunity to HIV in the mucosal system, the front-line barrier to sexually transmitted diseases;

- Showed how to suppress an overactive enzyme that contributes to clogged arteries and premature death in people with diabetes;
- Discovered a genetic mechanism that could lead to an entirely new approach to controlling pain; and,
- Pioneered approaches to discerning interactions between proteins in living cells a key to the new science of proteonomics.

Excellent researchers in a robust environment

The production of world-class research requires a national cadre of excellent researchers. They must be trained, developed and supported. To train and retain our best researchers in Canada, and to be able to recruit excellent researchers from other countries, we need to provide an environment that equals the best in the world in terms of infrastructure, networks, centres of excellence, support for students, and research funding. A robust research environment is the *sine qua non* of "brain gain".

With the creation of CIHR, Canada Research Chairs and the Canada Foundation for Innovation, the federal government has assembled a suite of programs to build a wordclass research environment. And it is building on strength. In 2001-2002, in terms of the impact of their research on cancer, Canadian scientists were ranked first in the world by respondents to a survey conducted by the Institute for Research in Cancer in Genoa, Italy.

In 2001-2002, CIHR provided 1,828 research training awards and 648 salary awards to support excellent researchers. Researcher salary programming was complemented by 167 Canada Research Chairs for health scientists and by extensive research personnel support from provincial agencies and not-for-profit health organizations. Funding for a strengthened national research infrastructure is being delivered through the Canada Foundation for Innovation. Government has also provided special support to be distributed to universities to help cover the indirect costs of federally-supported research.

It is predicted that in 10 years time, Canada could face a shortfall of researchers in the 100,000 range. In their initial consensus assessment of national health research needs, many of our Institutes have identified a need for rapid capacity building through training, retraining and special skills development. Among the Institute strategic initiatives launched in 2001-2002 are many with a focus on personnel:

• development of aboriginal peoples' capacity for research;

This Institute initiative, known as ACADRE (Aboriginal Capacity and Developmental Research Environments), recognizes that it is essential to create training environments that reflect the values and cultures of the people to be trained. ACADRE centres are being established in Alberta, Saskatchewan, Manitoba and Ontario.

- training of researchers in the area of stroke;
- training for cross-disciplinary team research;

known as the Strategic Training Initiative in Health Research, this unique, multi-Institute program is already supporting fifty-one (51) training centres across Canada. Selection decisions took into consideration the productivity and enthusiasm of the researchers who will serve as mentors and the creativity they have displayed in developing new approaches to developing cross-disciplinary thinking. This bold initiative is a partnership between CIHR, health charities, the provinces and industry. Over the next six years the training centres will receive well over \$84 million from CIHR and partners; and,

- four initiatives for broadening research capacity in genetics;
 - o career transition awards;
 - o grants for research visits to acquire new perspectives and skills;
 - o clinical investigator awards; and,
 - awards for students to pursue programs that combine M.D. and PhD training.

Databases are an essential piece of research infrastructure. Building them, and making them readily accessible to all researchers, strengthens our research environment. CIHR Institutes have launched initiatives related to:

- a national surveillance systems for diabetes;
- access to a major genome database, in partnership with the private sector; and,
- assessing the current state and usage of population and health services research databases.

A robust Canadian health research environment is emerging. We know from speaking with research leaders in Europe that they sense a new excitement among young health researchers about the opportunities opening in Canada. And visitors to CIHR from Australia, New Zealand and other countries have remarked upon the speed with which the Canadian health research community is taking the lead in interdisciplinary approaches, priority setting and capacity building.

A researcher at the University of British Columbia, recently recruited back to Canada after twelve (12) years in the United States describes the current environment as "well-funded right now... and there's a buzz". She attributes the change in Canada's research environment to greater federal funding... "That's the main message and it's certainly what lured me back from the United States."

But for balanced reporting, we also provide the perspective of a leading Canadian health researcher at the University of Alberta who recently received a \$400,000 research grant

from the Howard Hughes Foundation in the United States. In his view "We see ourselves as poor cousins of researchers in the U.S...The level of funding is incredibly different there... Really, what this [the Hughes grant] does is provide the shortfall of Canadian funding dollars."

CIHR is moving towards its goal of providing an internationally comparable level of funding for Canada's top researchers. From a 1996-1997 baseline of \$67,200 for an average federal health research grant, CIHR has been able to move to \$92,200 in 2000-2001 and then to \$102,100 in 2001-2002. By comparison, the average grant from the National Institutes of Health in the United States is in the \$500,000 range.

Partnerships and public engagement

Partnerships enable sharing of different perspectives and pooling of resources to achieve critical mass and realize the benefits of synergy. They lead to coordinated efforts and optimal use of resources. CIHR has set in place a strong committee and staff structure to maintain the hundreds of partnerships it has already formed and to negotiate new ones, in Canada and internationally.

A CIHR Working Group on Partnerships, chaired by the Presidents of two provincial health research agencies, has established six core values to be respected as CIHR links its efforts with those of other organizations. These include:

- freedom of inquiry;
- open dissemination of all research results;
- serving the public good;
- integrity in research;
- avoidance of conflict of interest; and,
- accountability and transparency.

CIHR partners very actively with not-for-profit health agencies. These health charities receive direct funding from millions of Canadians who personally support their goal of promoting health services and research on specific diseases or other health challenges. Through our Health Research Partnerships Fund, we are helping the smaller health charities build capacity in the research areas to which they are dedicated.

The Scientific Director of the CIHR Institute of Nutrition, Metabolism, and Diabetes writes of the leveraging effect of partnerships:

"Under a very tight timeline we were able to bring together the Canadian Diabetes Association, the Kidney Foundation, and the Heart and Stroke Foundation of Canada along with two other CIHR Institutes to fund programs that cut across the chronic diseases of interest to these organizations... while the original agreement only had funds for two new emerging teams in chronic disease, in the end we were able to fund six of the seven that were rated very good or higher." The CIHR Institute of Infection and Immunity has led the development of a Memorandum of Understanding (MOU) about research related to the safety and integrity of Canada's food and water supplies. The MOU focuses on microbial contamination of food and water and anti-microbial resistance in the food production chain. The fifteen (15) partners to the agreement are listed below to indicate, by one example from hundreds, the depth of CIHR partnering:

- Agriculture and Agri-Food Canada;
- Canadian Aquaculture Alliance;
- Canadian Bacterial Disease Network;
- Canadian Food Inspection Agency;
- Canadian Agri-Food Research Council;
- Canadian Pork Council;
- Canadian Institutes of Health Research;
- Canadian Veterinary Medical Association;
- Canadian Water Network;
- Chicken Farmers of Canada;
- Environment Canada;
- Genome Canada;
- Health Canada;
- National Research Council; and,
- National Science and Engineering Research Council.

Our private-sector partners are diverse, ranging from small university start-ups to the largest biotechnology and pharmaceutical companies. CIHR has been particularly active with Canada's research-based pharmaceutical companies (Rx&D). The CIHR-Rx&D Research Program – a jointly funded initiative – facilitates collaborative partnerships among academia, industry and government. In 2001-2002, CIHR produced an evaluation and performance measurement framework for the program to promote ongoing monitoring and continuous improvement.

International partnering

In February 2002, CIHR's Institute of Genetics, along with Canada's Network of Centres of Excellence in Genetics (the Canadian Genetic Diseases Network) signed an agreement with the Max Planck Institute for Molecular Genetics in Germany. This international partnership will focus on shared development and application of genomic technologies. It will help meet the growing international need for researchers trained for work in genetics and genomics.

In developing countries, a disease that may be completely under control elsewhere is often debilitating or fatal for millions of children, women and men. A holistic and farsighted view of the health problems faced by developing countries, and the establishment of global health priorities, would contribute to better health for everyone on the planet. On behalf of the 13 Institutes, CIHR has signed a Memorandum of Understanding with the Canadian International Development Agency, Health Canada and the International Development Research Centre expressing a commitment to collaborate on international health research.

Health disparities between aboriginal peoples and the general population are strikingly similar in many countries. Recognizing this, Canada, Australia, and New Zealand have entered into the International Cooperation Agreement on Indigenous Health. Partners have agreed to exchange graduate students, develop international research priorities, and share scientific expertise. An International Forum on Indigenous Health will be held in Townsville, Australia, and partners will establish an International Indigenous Health Network.

The Health Secretariat of the United Mexican States and CIHR signed a letter of intent on January 31, 2002 to develop health research, research training, clinical training and knowledge translation based on equality, reciprocity and mutual benefit. The two organizations have agreed to collaborate on environmental health, genetics and genomics, needs of indigenous peoples and vulnerable populations, health policy development, health services, financing and electronic forms of knowledge transfer.

Increasing public involvement in health research

CIHR is creating opportunities for Canadians to be engaged in the health research enterprise. The 13 Institute Advisory Boards involve a total of 212 Canadians in the planning of health research activities. Institute consensus conferences, to develop national research priorities, include Canadian specialists and generalists alike. Consultation is inclusive. For example, when the Institute of Population and Public Health and partners (the Canadian Institute for Health Information and the Canadian Population Health Initiative) set out to determine national research and knowledge translation priorities, it consulted more than four hundred (400) stakeholders in ten (10) cities. Non-specialists engaged in the work of CIHR tell us that they feel their voice is truly being heard - and is making a difference.

Canadians are involved in a CIHR program that aims to increase the responsiveness of Canadian health research to community needs. This program, Community Alliances for Health Research, supports partnerships between researchers and communities with the expectation that community participants will be involved in all aspects of the research endeavour. With \$35 million the program is supporting 19 projects focused on areas such as:

- suicide prevention;
- health care in the home and community;
- community-based care;
- coordinating health promotion and health services;
- aboriginal health care;

- rural health;
- primary mental health;
- maritime workplace safety;
- unpaid care giving; and,
- injuries to children and youth from hockey playing.

Translating and using research results

Putting health research discoveries to work for Canadians requires that new knowledge be shared, its practical potential tested, and any resulting improvement in health services, policies or products be promoted, adopted and used. The process of turning research results into action is neither linear nor simple, nor as fast as we would like it to be. We aim to accelerate the transformation of knowledge into benefits in a novel, coordinated and integrated way.

CIHR is building in-house capacity to understand and promote knowledge translation. In our redesigned organization, we have created and begun to staff a Knowledge Translation (KT) function. A KT strategy and framework will be released later in 2002. We have already launched a strategic initiative to generate research in the knowledge translation process.

• With a major grant from CIHR, an interdisciplinary team is focusing on ways of drastically shortening the average 15-year time lag between the making of a discovery that has practical application and the actual implementation of a health innovation.

Two CIHR Institute initiatives are specifically advancing research in areas near the applied end of the research spectrum:

- improving the quality of health care in Canadian hospitals; and,
- financing health care in the face of changing expectations.

In 2001-2002, Canadian health research generated knowledge that will have direct practical impact. For example, in our Annual Report (which will be posted at www.cihr.ca), we feature a story on a CIHR researcher who has developed a vaccine against *E. coli* in cows. *E. coli* from cow pastures can contaminate water tables, with disastrous results as witnessed in Walkerton, Ontario. Other highly practical results include:

- a new treatment for Hepatitis C that has cured more than half of the patients in a trial;
- a simple blood test, measuring levels of a particular protein, that can identify patients at high risk of heart disease;

- enabling of more efficient and effective delivery of emergency health services through standardized guidelines for diagnosing the extent of ankle, knee and head injuries;
- a finding that the pain-killing effects of opioids can be enhanced by the addition of small amounts of opioid antagonists this finding should enable lower dosages of pain-killers, fewer side effects for patients and reduced drug costs;
- a simple treatment for anaemia that could mean a sharp increase in quality of life for up to 60% of cancer patients; and,
- more precise measures of the immune status of persons with HIV/AIDS allow much better tailoring of drug delivery this means fewer side effects and also a reduction in the estimated annual expenditure of \$10,000 per patient for anti HIV drugs.

CIHR has a suite of programs that foster closer links between universities and industry, thus improving the likelihood that discoveries will lead to new health products. A new addition to the program portfolio, our Proof of Principle (POP) program, is having a high impact by supporting the design and testing of health innovations. Examples include:

- Health researchers in Toronto have designed a special stair rail for seniors with the goal of reducing falls the leading cause of accidental death among the elderly. The rail provides a much better grip than conventional railings and compensates for seniors' reduced arm strength. The CIHR Proof of Principle grant will allow the team to investigate ways to reduce the cost of the rail while improving its quality and comfort; and,
- A 10% increase in the rate of healing wounds would translate into multimillion dollar savings for the Canadian health care system. With resources provided through a CIHR POP grant, a Canadian health researcher is designing and validating new ways to dress wounds using biomaterials that gradually release healing agents.

To build Canadian capacity to translate research findings for wider accessibility and improved potential for use, CIHR has created a Science Writer Scholarship that engages undergraduates and graduate students in the effective communication of research findings.

Pursuing organizational excellence

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

Leading towards consensus

In 2001-2002, CIHR brought leadership to consultative processes within the Canadian health research system – on stem cell research, on formulating policy for ethical use of placebos in clinical trials, on the setting of an overall direction for Canadian health research, and on the development of research agendas in the 13 health areas covered by our Institutes.

• *Stem cells*. Research using pluripotent cells (stem cells) investigates the processes through which they grow, multiply and differentiate to become different parts of the body. The therapeutic potential of stem cells is enormous. For example, by understanding the processes by which a stem cell grows and differentiates to become a kidney, it might be possible, in the future, to take a stem cell from a person with kidney disease and manage its growth into a new kidney. When transplanted in the patient, such a kidney will be less likely to be rejected than one provided by a donor. Needing fewer anti-rejection drugs, patients would have better quality of life, and likely at less overall cost to the health care system.

CIHR has led nation-wide discussions on stem cell issues and has published guidelines for stem cell research funded by CIHR, consistent with the government's proposed legislation on assisted human reproduction. Public interest in stem cell issues and media attention have been exceptional. We are creating a National Stem Cell Oversight Committee to provide ethical review of all proposals for research with stem cells.

• *Policy on use of placebos in clinical trials*. In some clinical trials of new medications, half of the participants receive new medications whereas others receive a placebo, a look-alike made of inert substances. This allows comparison of the health status of those who received the medication with the health of a control group that did not. There are important ethical issues surrounding use of placebos that must be given full consideration.

In Partnership with Health Canada, CIHR has facilitated public discussion and a stakeholder conference on this issue. A draft report is being prepared.

- *A Canadian health research outlook.* In 2001-2002, CIHR published *r:evolution*, a strategy document that sets out four broad directions for Canadian health research.
- *National health research priorities.* Each of our 13 Institutes have all responded rapidly and effectively to their mandates to lead consensual development of a national research agenda in their areas of health. They have commenced an ongoing process of consensus conferences, strategic research planning and iterative, shared development of national research priorities.

Innovative thinking

CIHR is a Canadian innovation, a model for the world of a new way of approaching the generation and use of health knowledge. In a short period of time we have demonstrated that this innovative structure spawns innovative programming. Some examples:

- A program that has created 12 interdisciplinary health research teams, with researchers from many disciplines bringing different perspectives and skills to health issues such as: the special challenges facing frail elderly people, autism, susceptibility to breast cancer, diabetes in the aboriginal population, neurological diseases and opiate addiction;
- Grant writing workshops;
- A speaker's program to keep Advisory Board members up to date in subjects relevant to their Institute's mandate;
- Research training centres that focus on instilling broad interdisciplinary thinking;
- Research in socially sensitive areas: health benefits of marijuana, controlled administration of heroin to addicts, violence against women;
- Greater recognition of the contributions and achievements of research students;
- Support for prototype development by researchers with ideas for marketable health products;
- Research training centres that engage aboriginal students and are responsive to aboriginal cultures;
- A place on Team Canada missions; and,
- Brainstorming sessions with research trainees, mentors and program administrators.

Responsible, responsive management

CIHR has completed a 16-month organizational redesign project. This major realignment of human resources began with the identification of functions required for delivery on our mandate. With input from our Governing Council and all levels of the existing organization, we grouped functions into portfolios and then developed and posted descriptions of all positions. Staff members were required to identify those positions in the new organization that suited their skills, abilities and interests. Virtually all staff have elected to stay with CIHR in its reorganized form and most have obtained a position that appeared on their preferred list.

During the past year we developed key management accountability instruments:

- a refined CIHR planning, reporting and accountability structure;
- a policy on evaluation and performance measurement;
- an agency-wide performance measurement framework;

- frameworks for evaluation of our open grants program, our two MRC-CIHR transition programs, and our largest university-industry partnership program;
- a policy on internal audit; and,
- a corporate risk assessment and audit plan.

With partners (Industry Canada, Department of Finance, SSHRC, NSERC and Treasury Board) we commissioned an evaluation of the Networks of Centres of Excellence Program. Key findings were that: the program is effective and continues to fill a critical niche in federal support for science and technology but that it could be improved through greater sharing of lessons learned. Participating researchers

are concerned about the amount of required administrative reporting.

For 2001-2002 we:

- implemented financial systems compliant with the Federal government's Financial Information Strategy (FIS);
- converted to a system of full accrual accounting;
- in partnership with other federal granting agencies, conducted visits to universities to review the mechanisms in place for the control of grant funds; and,
- received an unqualified report from the Office of the Auditor General on CIHR's financial statements. Details appear in our Annual Report.

Our largest program, Research Operating Grants, was audited by the OAG as part of a government-wide review of selected grants and contributions programs. The OAG expressed confidence in CIHR's grant selection process, which utilizes advice from recognized scientific experts. Areas for improvement included a closer monitoring of the size of unspent balances in grant accounts and a greater focus on measuring program results and impacts. In response CIHR has initiated an evaluation of the program. This will be followed by evaluations of all of CIHR's research and research training programs.

Continuous improvement

To assess levels of satisfaction with our current services, and the expectations of our communities about the level of service we should be providing, CIHR contracted an independent survey of applicants, review panel members, and university officers involved in the financial administration of CIHR grants. Measured using Government's common assessment standard, the average level of satisfaction with our services is 78%. The average satisfaction level for review panel members was 86%; for applicants (including those who did not receive funding) it was 68%, and for university financial officers it was 82%. Findings include:

• Review panel members feel that their opinions are treated appropriately. They would like to review fewer applications and would like them to be even closer to the topic in which they have specialized;

- Applicants for CIHR grants appreciate the courtesy, competence and discretion of our staff but they would like to see faster decision-making and feedback on their applications;
- We are generally successful in making information available to applicants but our website could be more user friendly; and,
- When applicants speak directly to staff, they report receiving helpful guidance but they find our written guides could be clearer and our procedures simpler.

CIHR will be using this valuable feedback to further guide service improvement initiatives. Adjustments already underway include:

- a redesign of the CIHR website;
- development, in partnership with other organizations, of a common *Curriculum Vitae* form for researchers;
- a study of our process for managing meetings; and,
- an examination of every aspect of the application and review process. This has produced 22 recommendations, many of which should lead to improved service.

A dedicated, healthy and diversified staff

CIHR's inclusive, team-based management approach and its staff recognition programs help keep CIHR personnel informed, connected and motivated. Frequent all-staff assemblies and regular briefing sessions bring people together while a Walking Club and Weight Watchers group contribute to keeping CIHR employees fit and energized for service in the public good. We are a diversified, multi-lingual organization that unites different cultural and intellectual perspectives in a shared quest for excellence.

The Future

Planned activities for 2002-2003 have been provided in our Report to Parliament on Plans and Priorities in February-March of 2002, available through our website.

In fiscal year 2002-2003, CIHR will be even more productive as we move closer to full scale operation and the health research system responds to the past two years of extensive capacity building.

Parliament and Canadians can expect to see rapid expansion of partnerships as more organizations in government, not-for-profit and private sectors become aware of what our Institutes have achieved to date and what CIHR can bring to a joint effort.

The number and scope of cross-cutting initiatives, such as the 2001-2002 initiative in Rural Health, will expand to include northern health, health of vulnerable populations, global health, nerve regeneration, environmental influences, tobacco use, injuries and life-long health status measurement.

Our knowledge translation activities will greatly expand.

We will implement our corporate performance measurement framework, and develop frameworks for the Institutes, bringing greater depth to our reporting of results.

2002-2003 will be a year of greater CIHR public activity and an increased international presence.

As our new corporate planning function comes on stream, we will endeavour to articulate even more fully the benefits of health research – to promote and encourage health, productivity, a sense of nation and a robust economy – and make the case for the greater level of public investment that is required for Canada to achieve its goal of placing among the top five research-oriented countries of the world.

Financial Tables

A Management Discussion and Analysis of CIHR finances in 2001-2002 is available in the CIHR Annual Report, posted at our web site.

List of financial tables

- 1. Summary of Voted Appropriations
- 2. Comparison of Total Planned to Actual Spending
- 3. Historical Comparison of Total Planned to Actual Spending
- 4. Revenues
- 5. Transfer payments
- 6. Contingent liabilities

Financial Table 1

Vote		20	001-2002 Spendin	g
		(in millions of dollars)		
		Planned Spending	Total Authorities	Actua
15	Operating expenditures	31.8	33.1	27.6
20	Grants and Scholarships	506.8	518.7	494.5
(S)	Contribution to employee benefit plans	1.9	2.0	2.0

Note: Figures in the table may not appear to add correctly because of rounding.

Financial Table 2

Comparison of Total Planne	ed to Actual	Spending, 20	01-2002			
Canadian Institutes of Health Research						
The creation and exchange of new knowledge for improving health	Planned	Total Authorities	Actual			
Full-time Equivalents number	180	180	175			
(in millions of dollars)						
Operating includes contributions to employee benefit plans)	33.7	35.1	29.6			
Grants and Contributions	506.8	518.7	494.5			
Total Gross Expenditures	540.5	553.8	524.1			
_ess: Respendable Revenues ³	-	-	-			
Total Net Expenditures	540.5	553.8	524.1			
_ess: Non-respendable Revenues ⁴	-1.0	-1.0	-1.4			
Plus: Cost of services provided by other departments	1.4	1.4	1.5			
Net Cost of the Program	540.9	554.2	524.2			

Note: Figures in the table may not appear to add correctly because of rounding.

3

These revenues were formerly called Revenues Credited to the Vote.

4 These revenues were formerly called Revenues Credited to the General Government Revenues@ (GGR).

Financial Table 3

H Total Plann	istorical (led Spend			nding	
	Canadian Institutes of Health Research (in millions of dollars)				
The creation and exchange of new knowledge for improving health					
	Actual	Actual	Planned	Authorized	Actual
	310.5	390.0	540.5	553.8	524.1

Financial Table 4

		Rev	enues		
	Canadian Institutes of Health Research (in millions of dollars)				
Non-Respendable					
	1999-2000	2000-2001		2001-2002	
	Actual	Actual	Planned Spending	Total Authorities	Actual
	0.6	0.9	1.0	1.0	1.4
Total					
Non-Respendable	0.6	0.9	1.0	1.0	1.4
Total Revenues	0.6	0.9	1.0	1.0	1.4

Financial Table 5

	Tra	nsfer Payme	ents	
Canadian Institute Grants and Award (in millions of dollar		rch		
1999-2000	2000-2001		2001-2002	
Actual	Actual	Planned Spending	Total Authorities	Actual
296.3	369.8	506.8	518.7	494.5

Financial Table 6

Contingent Liabilities					
Canadian Institutes of Health Research (in millions of dollars)					
List of Contingent Amount of Contingent Liability Liabilities					
	March 31, 2000	March 31, 2001	Current as of March 31, 2002		
Claims, Pending and Threatened Litigation					
Litigations	-	0.8	0.8		
Total	_	0.8	0.8		