

INSTITUTE OF  
CANCER RESEARCH

ANNUAL REPORT  
2002 - 2003



**CIHR IRSC**  
Canadian Institutes of Health Research    Instituts de recherche en santé du Canada

**Canada**

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## MESSAGE FROM THE SCIENTIFIC DIRECTOR



Dr. Philip E. Branton,  
Scientific Director,  
Institute of Cancer Research,  
Canadian Institutes of Health  
Research.

The fiscal year 2002-2003 provided both challenges and rewards for the staff of the CIHR Institute of Cancer Research (ICR), as we continued to work with our partners to identify national research priorities for cancer research. As Scientific Director of ICR and Chair of the Research Action Group of the Canadian Strategy for Cancer Control, I have ensured that ICR provides a leadership role in the coordination of Canada's cancer research agenda and remains a key player in the cancer research field.

Following the extensive planning and consultation process of last year, six research themes were identified as Institute priorities: Palliative and End of Life Care, Molecular Profiling of Tumours, Clinical Trials, Early Detection of Cancer, Risk Behaviour and Prevention, and Molecular and Functional Imaging. Members of our Institute Advisory Board were instrumental in taking ownership of these priorities and moving them ahead to develop both a short and a long term strategic plan for each research area. As a result, ICR is now ready to launch a series of Requests for Applications (RFA) in June 2003.

The single most important factor in our progress this year has been the support of the many organizations that have become our partners on large-scale projects such as the Training Grant Program and the Palliative and End of Life Care Initiative. These partners include other CIHR Institutes, the National Cancer Institute of Canada (NCIC), the Fonds de la Recherche en Santé du Québec (FRSQ), the Cancer Research Society (CRS), provincial cancer boards and agencies, and both large and small voluntary organizations involved in the support of health research. This kind of unprecedented collaboration signals a whole new era in cooperative health research.

Under the strong leadership of our President, Alan Bernstein, and with the support and guidance of the Governing Council, CIHR continues to grow and thrive and the Institutes are beginning to make a positive impact on the changing face of health research in Canada. At ICR, we are fortunate to have a dedicated and hardworking staff, both here at the Institute in Montreal and at the CIHR offices in Ottawa. Their hard work, combined with the advice and commitment of an excellent Advisory Board and the help of many individuals

at the CIHR central office, has contributed to the growth and success of ICR.

As we move ahead with the development and implementation of our strategic plan, and the launch of our research initiatives, we continue to welcome your input. By building on our strengths and coordinating our approach, we can maximize the advances in cancer research to improve the prevention, diagnosis and treatment of cancer, and to make a positive impact on the lives of cancer patients and their families. I believe that the achievements described in this year's annual report clearly demonstrate that ICR has already taken positive steps in this direction with the support of both our research community and our many partners.



Philip E. Branton, Ph.D., FRSC  
Scientific Director, CIHR Institute of Cancer Research  
Gilman Cheney Professor,  
Department of Biochemistry, McGill University

*The single most important factor in our progress this year has been the support of the many organizations that have become our partners on large-scale projects such as the Training Grant Program and the Palliative and End of Life Care Initiative.*

## PROFILE OF THE INSTITUTE



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As one of the 13 virtual Institutes of CIHR, the goals of the Institute of Cancer Research (ICR) align with the CIHR mandate of supporting and encouraging excellent, multidisciplinary research across the four pillars of health research: basic, clinical, health services and policy, and the health of populations. ICR is housed in three modest offices located in the McIntyre Medical Sciences Building of McGill University in Montreal.

The small but effective core staff, led by the Scientific Director, Dr. Philip Branton, has remained constant throughout 2002-2003 although some job descriptions have changed. As a result of the CIHR reorganization, Institute Liaison, Judy Bray, became Assistant Director, Special Projects, and Project Officer, Patrick Haag, is now ICR's Project and Communications Officer. Both are based in Ottawa as part of the Ottawa-based Institute Staff (OBIS) team and both are shared equally with the Institute of Infection and Immunity. ICR's Assistant Director, Benoît Lussier, and Administrative Assistant, Diana Sarai, are full time ICR employees located at ICR's offices in Montreal. The organizational excellence that ICR strives to achieve is made possible by the support and dedication of

this excellent team and the combined talents and hard work of the Institute Advisory Board.

The seventeen members of the Institute Advisory Board (IAB), who are drawn from the research community, stakeholder groups and the lay public, offer advice and direction to the Scientific Director at regular IAB meetings. These IAB meetings are held at different locations across the country, providing an opportunity for interaction with the local research community, representatives of governmental agencies, voluntary organizations and regional politicians. In 2002-2003, IAB members assumed the lead in moving ahead the Institute priorities and were instrumental in the planning of the Institute's research initiatives. Their leadership has been an important element of ICR's success during the last year.

All thirteen Institute Scientific Directors meet once a month either in person or by teleconference to exchange information and discuss research planning and priorities across CIHR. These meetings facilitate linkage between the Institutes and CIHR staff based in Ottawa, and also provide a forum for inter-Institute collaborations. As a result, many strategic initiatives

involve several Institutes, each with a unique research focus. This process encourages Institute initiatives that are both multi-disciplinary and cross-pillar. It also facilitates the development of large cross-cutting initiatives which span the mandate of several Institutes. One example is the cross-cutting initiative on tobacco control research, led by ICR and the Institute of Neurosciences, Mental Health and Addiction.

ICR is becoming well known as an important player in the cancer research field. The Institute provides an avenue for advancing Canadian research priorities through the development of strategic funding opportunities. ICR continues to seek input from researchers and all stakeholders in the cancer research field as future directions are determined.

## Staff Biographies



**Dr. Philip Branton** has a highly successful research career in the area of viruses, tumour suppressors, cell death and cell cycle spanning several decades and is well known and respected in the cancer research field. Dr. Branton's role as Chair of the Research Action Group of the Canadian Strategy for Cancer Control has enabled close links with the cancer research community and has facilitated research planning at a nationally coordinated level. Dr. Branton also provides input to many other cancer related organizations.



**Dr. Benoît Lussier** received his Ph.D. in Physiology from the University of Western Ontario and was involved in signal transduction research for several years at l'Université de Montréal. Dr. Lussier joined CIHR in April 2001 and has been the Assistant Director of the Institute of Cancer Research since September 2001.



**Ms. Diana Sarai** has a Bachelor of Commerce degree from McGill University and has worked for 10 years as a Special Events Coordinator for a Canadian cancer research group. She joined ICR on March 2001 and is responsible for the administration of the Institute.



**Dr. Judith Bray** received her Ph.D. in Cancer Immunology in the U.K. and worked as a cancer researcher both in the U.K. and Canada for many years. Dr. Bray joined CIHR in November 2000 and is currently Assistant Director, Special Projects for both the Institute of Cancer Research and the Institute of Infection and Immunity.



**Mr. Patrick Haag** has a Bachelor of Arts, Major in Physical Geography, from the University of Ottawa and worked for 4 years as a Project Officer for the Youth and Outreach division at the National Capital Commission in Ottawa. He joined ICR in January 2002 as the Project Officer for the Institute of Cancer Research and the Institute of Infection and Immunity.

## OUTSTANDING RESEARCH



*CIHR  
invested over  
\$79 million in  
cancer  
research in  
2002-2003.*

As the fight against cancer continues, it is estimated that in 2003 alone 139,900 new cancer cases will be identified and 67,400 people will die, making cancer the leading cause of premature death in Canada. During their lifetimes, 38 percent of Canadian women and 41 percent of Canadian men will develop cancer, but it is estimated that this incidence could be halved if people did not smoke, avoided excessive sun exposure and adopted healthier life styles that included adequate physical activity and appropriate food choices to maintain optimum body weight. Smoking cessation alone would result in an estimated 30 percent reduction in cancer, most of it in lung cancer. Over the last fifteen years, the overall incidence and death rates for cancer have either stabilized or decreased, indicating that an increased understanding of the disease is beginning to have an impact on prevention, diagnosis and treatment.

CIHR is known for its funding of excellent research, and cancer research is no exception. As Canada's premier funding agency for health research, CIHR invested over \$79 million in cancer research in 2002-2003, a significant increase over last year's commitment. There are many examples of outstanding accom-

plishments among the cancer researchers receiving CIHR funding; for example, the work of Dr. Gurmit Singh, from the Hamilton Regional Cancer Centre, that demonstrates the effectiveness of tetracycline, a common and inexpensive drug, in reducing bone metastases in breast and prostate cancer in animal models; or the discovery by Dr. Patrick Lee of Dalhousie University of a reovirus that specifically kills cancer cells. There have also been many recent advances in the molecular biology of cancer such as the work of Dr. Nahum Sonenberg of McGill University and Dr. Charles Boone of the University of Toronto. Each incremental step forward in our understanding of cancer brings us a step closer to successful interventions in the neoplastic process. In the area of cancer treatment, the work of Dr. Steven Gallinger could result in a test to predict a colon cancer patient's responsiveness to post-surgical chemotherapy. The ground breaking stem cell research of Dr. John Dick and his team of researchers at Toronto's University Health Network may lead to important advances in stem cell therapy. These are just a few of the many examples of excellent Canadian cancer research that is supported by CIHR.

The Institute of Cancer Research is just beginning to fund its own strategic initiatives. These initiatives will build on the existing strong base of cancer research in Canada and will be an additional source of targeted CIHR funding. Together with its many partners, CIHR has committed more than \$20 million over the next seven years for strategic training programs in cancer research. ICR has committed over half (\$12 million) of this money in support of a total of 23 strategic training grants that are either wholly or partially cancer related, demonstrating a strong commitment to the training of Canada's new generation of excellent young researchers. The research topics covered by these

training centres include tobacco control, therapeutics, molecular biology, bioinformatics, radiation oncology, palliative care and psychosocial oncology. In 2002-2003, CIHR in collaboration with Cancer Care Ontario (CCO), the Cancer Research Society (CRS), Fonds de la recherche en santé du Québec (FRSQ) and the Michael Smith Foundation for Health Research started funding the first 16 training programs awarded in 2001-2002. In 2002-2003, ICR was able to commit funding for seven new training grant programs with the help of many partner organizations. The funding for these seven additional training programs will begin in 2003-2004.



*CIHR has committed more than \$20 million over the next seven years for strategic training programs in cancer research.*

**Second Strategic Training Initiative in Health Research 2002-2003  
Training program grants for cancer research**

Principal Investigator	Principal Institution	Title of Proposal
Cass, Carol E.	Alberta Cancer Board	The Alberta Cancer Board Training Program in Translational Cancer Research in partnership with the University of Alberta and the University of Calgary
Cohen, S. Robin	McGill University	Palliative Care Cancer Research
Coulombe, Benoît	Institut de recherches cliniques de Montréal	The IRCM training program in cancer research: from genomics to molecular therapy
Johnston, Gerald C.	Dalhousie University	An integrated cancer research training initiative in Nova Scotia
Koropatnick, Donald J.	London Regional Cancer Centre	London Strategic Training Initiative in cancer research and technology transfer
Liu, Fei-Fei	Princess Margaret Hospital	Research Excellence in Radiation Medicine for the 21 <sup>st</sup> Century
Loiselle, Carmen G.	McGill University	Comprehensive research training program in psychosocial oncology

*In partnership with the Cancer Research Society (CRS), ICR has invested a total of \$1.27 million over 18 months in support of 29 top-ranked CRS research grants.*

A major financial commitment for 2002-2003 was the investment of \$3.5 million over 18 months towards strengthening and increasing cancer clinical trials. The Clinical Trials Group (CTG) of the National Cancer Institute of Canada (NCIC) is Canada's premier clinical trials organization outside the industry sector with over 60 institutions across the country enrolling patients in CTG studies. As clinical trials were identified as one of ICR's top six priorities, the decision was made to invest in the support of this highly successful clinical trials program. The first financial installment of \$2 million was made in 2002-2003 with the balance due in 2003-2004.

In partnership with the Cancer Research Society (CRS), ICR

has invested a total of \$1.27 million over 18 months in support of 29 top-ranked CRS research grants. Topics include the therapeutic properties of reovirus, effects of diet on colon cancer, genetic susceptibility in breast cancer, apoptosis and genetic analyses in a number of cancers. The first financial contribution of almost \$900,000 will be made in 2002-2003 with the balance due in 2003-2004.

During this fiscal year, ICR also contributed to the funding of an RFA entitled Invention-Tools, Techniques and Devices for Research and Medicine, which was launched in partnership with the Institute of Genetics and the Institute of Musculoskeletal Health and Arthritis.

### ICR Strategic Budget – Expenditures for 2002-2003

**ICR Budget for 2002-2003** **\$ 3,900,000**

Previous Commitments

Training Program Grants (TPG) (first round)	\$ 912,487
Gene Therapy for Neurological Disease IHRT*	\$ 50,000
Training Awards	\$ 9,765
Total:	\$ 972,252

New Commitments

NCIC Clinical Trials Group	\$ 2,000,000
ICR Co-funding of CRS Grants	\$ 859,500
TPG Development Grants	\$ 37,850
Inventions RFA	\$ 25,000
Total:	\$ 2,922,350

**Total Commitments** **\$ 3,894,602**

*Uncommitted* *\$ 5,398*

\* Interdisciplinary Health Research Teams.



## EXCELLENT RESEARCHERS AND A ROBUST RESEARCH ENVIRONMENT

Relative to other health research disciplines, cancer research continues to benefit from generous funding both in Canada and internationally. Within Canada, research is supported by both federal and provincial agencies and a number of non-government agencies including NCIC (through the support of the Canadian Cancer Society and the Terry Fox Foundation), the Canadian Breast Cancer Research Alliance (CBCRA), CRS and many smaller foundations and voluntary organizations which champion individual cancers such as the National Ovarian Cancer Association and the Canadian Prostate Cancer Research Initiative. ICR therefore entered a well-established and successful research arena with a long history of excellent research and world-class investigators.

For ICR, the process of identifying priorities began in 2001 with a large working group meeting involving cancer researchers from all four pillars of health research, lay persons, survivors and potential partners. As a result of this meeting, a web-based Delphi process was initiated to further refine the priorities and seek input from a broader population. Twelve main research themes emerged from the Delphi process. Taking the top two priorities from

each of the twelve themes, ICR compiled a list of 24 priority areas that were considered and voted upon at the ICR Advisory Board meeting in May 2002. The top six priorities were selected by IAB members and representatives from NCIC, the Canadian Association of Provincial Cancer Agencies (CAPCA) and Health Canada. In order of votes received, the six priorities were: Palliative and End of Life Care, Molecular Profiling of Tumours, Clinical Trials, Early Detection of Cancer, Risk Behaviour and Prevention, and Molecular and Functional Imaging. A multidisciplinary working group was created for each of these priorities, chaired or co-chaired by IAB members with the relevant expertise. Participation of representatives from potential partner organizations was strongly encouraged.

Since May 2002, all six working groups have met at least once to determine the best strategic approach for their particular priority. The full minutes of these meetings and the membership of each working group are available from the Institute on request. The majority of the funding committed in 2002-2003 in support of these initiatives will not commence until the 2004-2005 fiscal year.

### Institute Priorities

Palliative and End of Life Care

Molecular Profiling of Tumours

Clinical Trials

Early Detection of Cancer

Risk Behaviour and Prevention

Molecular and Functional Imaging

## Program Tools for the Palliative and End of Life Care Initiative

### New Emerging Teams (NET)

### Pilot Projects

### Career Transition Awards

## Palliative and End of Life Care

*Working Group Chair:*  
**Neil MacDonald**



Dr. MacDonald

This 17-member working group focused on capacity building, networking, infrastructure and the need for specialized peer review panels for palliative and end of life care research. The outcome was a recommendation for a multidisciplinary approach that would extend beyond the confines of cancer research to include research into palliative and end of life care for any disease or condition for which there is currently no cure. A series of Requests for

Applications (RFAs) were proposed for launch in June 2003. As capacity building was identified as the primary goal, the program tools selected were the five-year New Emerging Teams (NET) grants, one-year Pilot Project Grants and Career Transition Awards. ICR committed \$3.58 million to the funding of these RFAs. Due to the broad reaching multidisciplinary approach of this initiative, seven other CIHR Institutes and four external organizations expressed an interest in partnering on the RFAs and in contributing funds for applications of relevance to their respective research mandates.

In addition to the funding committed to next year's RFA launch, ICR was able to take advantage of two partnership opportunities

### Partners in the Palliative and End of Life Care Initiative

Canadian Breast Cancer Research Alliance

CIHR Institute of Aging

CIHR Institute of Circulatory and Respiratory Health

CIHR Institute of Gender and Health

CIHR Institute of Genetics

CIHR Institute of Health Services and Policy Research

CIHR Institute of Human Development, Child and Youth Health

CIHR Institute of Neurosciences, Mental Health and Addiction

Health Canada

Heart and Stroke Foundation

National Cancer Institute of Canada

National Ovarian Cancer Association

to commit a supplementary \$1.4 million to the funding of two successful palliative and end of life care applications submitted in the context of RFAs posted in 2002 by other Institutes. One partnership was with the Institute of Aging in support of a New Emerging Team grant in palliative care awarded to a team led by Dr. Pierre Allard at the University of Ottawa. The second was a partnership with NCIC on a Training Program Grant in palliative and end of life care, awarded to a team led by Dr. Robin Cohen at McGill University. Funding for both of these grants will start in April 2003.

The combined programs within the palliative and end of life care initiative represent a potential financial commitment of over \$12 million, making it the largest single research initiative in palliative and end of life care ever undertaken. In total, ICR has committed over \$5 million to palliative and end of life care.

### Molecular Profiling of Tumours

*Working Group Co-Chairs:*  
**Jim Woodgett** and  
**Gerry Johnston**

Researchers involved in the molecular profiling of tumours need access to tumour and tissue samples that are linked to



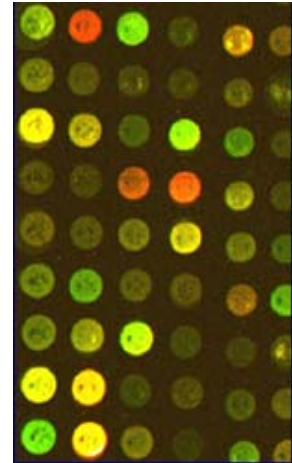
Dr. Woodgett

clinical data such as pathology reports, prognosis, response to therapy and patient outcome in order to screen the multitude of new tumour markers that are constantly being identified and to develop potential drugs. The primary focus of this working group was on tumour banks and the possibility of establishing a national tumour bank network. Currently, the tumour banking system in Canada is fragmented with areas of strength in certain provinces and little organized activity in others.

The working group recommended that ICR work with CAPCA and other potential end users such as NCIC, FRSQ, the Ontario Cancer Research Network and Genome Canada to coordinate existing tumour banks and encourage standardization of protocols and linkage to clinical data. Further meetings are planned with a view to moving this initiative forward. ICR has committed \$675,000 per year for 5 years to the Molecular Profiling of Tumours initiative and funding will begin in 2004-2005.



Dr. Johnston



*The primary focus of this working group (Molecular Profiling of Tumours) was on tumour banks and the possibility of establishing a national tumour bank network.*



*ICR has invested \$3.5 million in cancer clinical trials through the NCIC Clinical Trials Group.*

## Clinical Trials

*Working Group Chair:*  
**Joe Pater**



Dr. Pater

One of Canada's strengths in health research is our clinical trials networks and our ability to access patient data through our public health system. Topics discussed by the working group members included ethics in clinical trials, clinical trials databases, drug development, barriers to patient enrollment, use of non-cytotoxic drugs, and health service delivery of drugs. Recent advances in the understanding of the molecular biology of cancer have led to an increase in the number of potential new drugs waiting for evaluation. There is a pressing need to increase the number of cancer clinical trials in Canada.

The IAB recommended that, given the availability of resources for the 2002-2003 fiscal year, ICR could move ahead immediately on this priority by investing \$3.5 million in cancer clinical trials through the NCIC Clinical Trials Group. Through this partnership with NCIC, ICR's contribution will increase the number of cancer clinical trials in Canada, including those addressing psychosocial and supportive care issues.

## Early Detection of Cancer

*Working Group Co-Chairs:*  
**Heather Bryant** and  
**Jacques Brisson**



Dr. Bryant

Ideally, screening tests should involve non-invasive and safe technologies that can detect early stage cancer or pre-cancerous lesions with a low rate of false positives, and in a cost effective manner. For any screening program to be successful, it is important that there is uptake by the general population and specifically by traditionally underserved communities such as ethnic, aboriginal, rural and immigrant groups. Key issues addressed by this working group included the specificity of current widely used cancer screening tests, patient education, uptake of available screening procedures and the many current unknowns relating to existing tests.

As a first step, the working group recommended that ICR offer one year operating grants to a) evaluate and compare new screening technologies through the creation of cross-pillar, multidisciplinary research teams; b) perform mathematical modeling studies on the cost and benefits of existing Canadian cancer screening programs; and c) determine the rate of serious complications resulting from routine

colonoscopies performed to detect colon cancer. This RFA will be launched in June 2003 and ICR has committed \$500,000 from its 2004-2005 strategic budget to fund this one-year initiative.



Dr. Brisson

## Risk Behaviour and Prevention

*Working Group Chair:*  
**Roy Cameron**



Dr. Cameron

Cancer prevention remains arguably the most desirable outcome of cancer research. Yet despite the fact that as much as 50 percent of cancers could potentially be prevented by population-based lifestyle changes, especially smoking cessation, there has been little reduction in the incidence of most cancers.

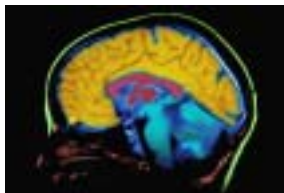
The federal government has been increasingly active in recent years in investing in public health and education as evidenced by the creation of the Canadian Tobacco Control Research Initiative, the Chronic Disease Prevention Alliance of Canada, the Canadian Healthy Heart Initiative and the Federal Provincial Territorial (FPT) Healthy Living Agenda. In addition, many provincial governments and voluntary organizations are actively in-

involved in promoting chronic disease prevention strategies for many diseases including cancer. The working group recommended that ICR should build on these existing partnerships, infrastructure and alliances.

When considering cancer prevention opportunities, the main candidates for study are tobacco, environmental carcinogens, obesity, diet and physical activity. The working group recommended that ICR concentrate its efforts on tobacco control, reserving some funds for potential partnership opportunities with other Institutes and organizations that focus on different areas of chronic disease prevention. Based on this recommendation, ICR has committed \$480,000 per year for 5 years to CIHR's Tobacco Abuse and Nicotine Addiction cross-cutting initiative. The initiative is being coordinated by the Canadian Tobacco Control Research Initiative (CTCRI). CTCRI is supported by a consortium of partners that includes CIHR, NCIC, the Heart and Stroke Foundation, Health Canada and the Canadian Lung Association. An RFA relating to research aimed at advancing the science to reduce tobacco abuse and nicotine addiction, and interventions to control tobacco use, will be launched in June 2003. Funding will begin in the summer of 2004.



*ICR has committed \$480,000 per year for 5 years to CIHR's Tobacco Abuse and Nicotine Addiction cross-cutting initiative.*



**Members under the Coordination of the Canadian Tobacco**

- Canadian Lung Association
- CIHR Institute of Aboriginal Peoples' Health
- CIHR Institute of Cancer Research
- CIHR Institute of Circulatory and Respiratory Health
- CIHR Institute of Gender and Health
- CIHR Institute of Human Development, Child and Youth Health
- CIHR Institute of Neurosciences, Mental Health and Addiction
- Health Canada
- The Heart and Stroke Foundation of Canada
- The National Cancer Institute of Canada

**Molecular and Functional Imaging**

Working Group Chair:  
**Ian Smith**



Dr. Smith

Specific genetic alterations underlie the development of many diseases including cancer. The challenge in molecular and functional imaging is to link these changes to image-related data. Sophisticated technology, procedures and software are required to pick up very early changes, creating the need for expertise in bioinformatics, engineering, physics, chemistry and mathematics.

Although there have been signifi-

cant advances in imaging technology in recent years, there is still a need for improvement in imaging and spectroscopy devices, contrast agents, radiopharmaceuticals and optically-labeled probes. The working group recommended that the ICR focus be on promoting the creation of small multidisciplinary teams whose research will facilitate the integration of expertise from the natural sciences into biomedical research. An RFA designed to promote novel technology applications in tumour imaging and to bring together researchers from the physical and life sciences will be launched in June 2003. ICR has committed \$450,000 per year for a period of 2 years for this initiative and funding will begin in the summer of 2004.



## PARTNERSHIPS AND PUBLIC ENGAGEMENT

ICR continues to build on existing partnerships and engage in new ones. ICR's leadership as a member of the Research Action Group of the Canadian Strategy for Cancer Control has been instrumental in the efforts to coordinate Canadian cancer research. The fact that ICR's Scientific Director chairs the Research Action Group and is also involved with five different Cancer Boards has consolidated these opportunities for partnership and public engagement.

The involvement of ICR in several large initiatives this year would not have been possible without the support of our many partners. Examples include the second round of training program grants in which the funding of seven new cancer research training programs was made possible through partnerships with NCIC, CCO, Cancer Care Nova Scotia, the Alberta Cancer Board, CRS, the Newton Foundation and the CURE Foundation. Similarly the Palliative and End of Life Care Initiative would have been much reduced in size and scope without the support of the seven other CIHR Institutes, the Canadian Breast Cancer Research Alliance (CBCRA), NCIC, the Heart and Stroke Foundation, the National Ovarian Cancer Association and Health Canada. These multiple partnerships demonstrate the value of national planning and priority setting and are just one example of the changing face of Canadian health re-

search brought about by the creation of CIHR.

ICR is currently exploring partnership opportunities with the Michael Cuccione Foundation and the National Ovarian Cancer Association for fellowship and doctoral research awards in pediatric oncology and gynecological cancer respectively. The possibility of industry partnerships, particularly in the area of drug development, is also an area of interest for ICR and we are actively pursuing such opportunities in collaboration with the CIHR Innovation and Industry Branch.

CIHR continues to have a close relationship with CBCRA and both parties are in the process of finalizing a Memorandum of Understanding that will reaffirm CIHR's financial commitment to the Alliance for a further 5-year period. Early in 2002, it was announced that CIHR would reopen its operating grants competition to applications in the area of breast cancer research, beginning with the March 2002 competition. ICR has contributed additional funding to the existing partnership by entering into an agreement with CBCRA and the Institute of Gender and Health to support successful grants in the "Translational Acceleration Grants Program for Breast Cancer Control", launched in May 2002 and intended to accelerate the translation of basic breast cancer research findings into practice.



## TRANSLATION AND USE OF KNOWLEDGE



**K**nowledge Translation in health research potentially includes all sectors of society and all activities from creation of knowledge to its application to yield positive health outcomes. According to the CIHR definition, “knowledge translation is the exchange, synthesis and ethically-sound application of researcher findings within a complex system of relationships among researchers and knowledge users”.

Workshops often provide an ideal venue for knowledge translation activities. ICR contributed financial support to 18 workshops in 2002-2003. The topics of these workshops, which ranged in size from a few dozen to hundreds of participants, included oncolytic virus therapeutics, nanotechnology, genetic testing, proteomics, psycho-oncology, knowledge translation and pediatric oncology. Such workshops serve to bring together knowledge producers (researchers) with knowledge users such as health care professionals, policy makers and the lay public. The outcomes of these workshops often provide

new knowledge and a different perspective for Institute strategic planning.

As part of its knowledge translation/communications strategy, ICR is a sponsor for a 1500 sq. ft. traveling museum exhibit entitled “Food for Health” which is being developed by the Canada Agriculture Museum. Currently, the exhibit is sponsored by five CIHR Institutes (ICR, the Institute of Nutrition, Metabolism and Diabetes, the Institute of Gender and Health, the Institute of Circulatory and Respiratory Health and the Institute of Infection and Immunity), the Canadian Food Inspection Agency, Health Canada, and Agriculture and Agri-food Canada. Beginning in March 2006, the exhibit will travel from coast to coast over a four-year period reaching young children and their families. One of the primary messages of the exhibit is the importance of a healthy lifestyle that includes a well balanced diet and adequate physical activity in preventing obesity and diseases such as diabetes, heart disease and cancer.



## ORGANIZATIONAL EXCELLENCE

ICR's achievements this year are a testament to organizational excellence. With a small core staff of five, two of whom are shared with another Institute, and the support of an excellent Advisory Board, ICR has succeeded in developing its six research priorities to the point of funding recommendations. ICR staff, in collaboration with IAB members, have assembled multidisciplinary working groups, planned both short and long term strategic initiatives and in many cases prepared RFAs for launch, all in the space of one year.

The smooth processing and review of the Institute RFAs is ensured by the hard work and support of a team of individuals in the CIHR Knowledge Creation Branch, headed by Deputy Director, Jean-François St-Denis. None of CIHR's Institutes exist in isolation but rely on the dedica-

tion and commitment of a large core staff of over 300 employees based in Ottawa. Beginning with the creation of the Institute, Dr. St-Denis has provided advice to Institute staff and IAB members, and continues to orchestrate the peer review process for ICR's strategic initiatives, in addition to managing many peer review panels for the operating grants program and the initiatives of other Institutes. The excellence in peer review, that was the hallmark of the Medical Research Council of Canada, continues to be the mainstay of CIHR, ensuring the continuity of excellent health research in Canada. This team approach to the planning and execution of research priorities is a key element of the CIHR philosophy and one that the Institutes continue to embrace. In this vibrant and supportive environment, ICR looks forward to 2004 with anticipation.

### ICR Operations Budget

#### Source of Funds

Carryover (from 2001-2002)		\$ 838,191
Institute Development Grant (2002-03)		<u>\$1,000,000</u>
	<b>Total</b>	<b>\$1,838,191</b>

#### Expenditures

Institute development		
<i>IAB</i>		\$ 108,737
<i>Workshops</i>		\$ 200,325
<i>Working Groups</i>		\$ 85,809
<i>Communications</i>		\$ 8,469
<i>Other</i>		<u>\$ 101,337</u>
	<b>Total</b>	\$ 504,677
Salaries		\$ 290,782
Institute Operations		<u>\$ 229,455</u>
	<b>Total</b>	<b>\$1,024,914</b>
<b>Uncommitted</b>		<b>\$ 813,277</b>

## ADVISORY BOARD

	<b>Heather Bryant (Chair)</b>	Vice President and Director of Epidemiology, Prevention and Screening, Alberta Cancer Board, Calgary
	<b>Jacques Brisson</b>	Professor of Epidemiology, Department of Social and Preventive Medicine, Laval University
	<b>Sharon K. Buehler</b>	Honorary Research Professor of Epidemiology, Faculty of Medicine, Memorial University, St. John's
	<b>Roy Cameron</b>	Director, National Cancer Institute of Canada's Centre for Behavioral Research and Program Evaluation, University of Waterloo
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	<b>Louis Dionne</b>	Retired surgeon and co-founder of the Maison Michel-Sarrazin, Sillery, Quebec
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Jim Woodgett

Professor, Ontario Cancer Institute, University of Toronto



Joy Yorath

Executive Director, Burnaby Hospital Foundation, breast cancer survivor, Vancouver

**CIHR Funding for Cancer Research**

	2001-2002	2002-2003
<b>Research Grants</b>		
Operating Grants	\$ 37,581,862	\$ 46,771,719
Group Grants	\$ 6,259,011	\$ 6,696,895
Equipment & Maintenance Grants	\$ 1,721,822	\$ 1,899,618
Clinical Trials	\$ 146,037	\$ 461,760
NCE Operating Grants	<u>\$ 3,525,000</u>	<u>\$ 3,525,000</u>
	<b>\$ 49,233,732</b>	<b>\$ 59,354,992</b>
<b>Training Awards</b>		
Studentships & Ph.D. Research Awards	\$ 2,293,356	\$ 2,386,322
Fellowships	\$ 3,926,012	\$ 4,392,865
Clinical Scientists	<u>\$ 362,221</u>	<u>\$ 388,141</u>
	<b>\$ 6,581,589</b>	<b>\$ 7,167,328</b>
<b>Investigator Awards</b>		
New Investigator	\$ 1,702,659	\$ 2,102,892
Investigator	\$ 2,106,993	\$ 2,143,589
Senior Investigator	\$ 708,712	\$ 683,058
Chair	<u>\$ 100,000</u>	<u>\$ 100,000</u>
	<b>\$ 4,618,364</b>	<b>\$ 5,029,539</b>
<b>Workshops &amp; Symposia</b>		
Workshops & Symposia	\$ 5,000	\$ 15,000
ICR-sponsored Workshops & Symposia	* <u>(\$ 136,437)</u>	* <u>(\$ 185,548)</u>
	* <b>(\$ 141,437)</b>	* <b>(\$ 200,548)</b>
<b>Strategic Initiative Grants</b>		
ICR Institute Support Grant	\$ 1,000,000	\$ 1,000,000
ICR Strategic Initiative Grants	** \$ 123,975	** \$ 2,025,000
Other Institute Cancer Initiative	-	\$ 640,920
CBCRA	\$ 2,000,000	\$ 2,000,000
Strategic Training Program Grants	*** <u>\$ 367,628</u>	*** <u>\$ 1,992,375</u>
	<b>\$ 3,491,603</b>	<b>\$ 7,658,295</b>
<b>TOTAL</b>	<b>\$ 63,930,289</b>	<b>\$ 79,225,153</b>
<b>Canada Research Chairs Funded Through CIHR</b>		
**** CRC - Health	<u>\$ 3,175,000</u>	<u>\$ 5,100,000</u>
	<b>\$ 3,175,000</b>	<b>\$ 5,100,000</b>
<b>TOTAL (including CRC - Health)</b>	<b>\$ 67,105,289</b>	<b>\$ 84,325,153</b>

- \* Funds for ICR-sponsored workshops & symposia are accounted for in ICR Institute Support Grant
- \*\* Excluding TPGs
- \*\*\* Amount proportional to cancer research component of 15 training programs
- \*\*\*\* The research interest of the chair holder is relevant to cancer research and/or the chair holder has been awarded operating grants for cancer research