# CIHR Institute of Circulatory and Respiratory Health

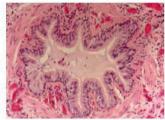
**Annual Report** 

April 2003 - March 2004







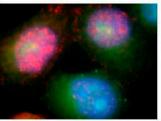
























Institute of Circulatory and Respiratory Health
Canadian Institutes of Health Research
Providence Health Care / St. Paul's Hospital, University of British Columbia
Burrard Building, Room 553
1081 Burrard Street
Vancouver, British Columbia V6Z 1Y6
www.cihr-irsc.gc.ca

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The CIHR Institute of Circulatory and Respiratory Health supports research into causes, mechanisms, prevention, screening, diagnosis, treatment, support systems, and palliation for a wide range of conditions associated with the heart, lungs, brain (stroke), blood vessels, blood, critical and intensive care, and sleep.

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## Message from the Scientific Director



This past year, Canadians came face-to-face with the realities of living in a global community, one that appears to be shrinking with each passing day. The severe acute respiratory syndrome (SARS) epidemic is but one example of this new reality. The Canadian health research enterprise rose to the challenge and offered much new knowledge and guidance during the trying time of the epidemic. It is impressive how fast Canadian researchers sequenced the SARS genome. What a remarkable achievement! Such an effort set the stage for the development of prototype vaccines.

The unpredictability of health challenges and pressures on the health care system beg the need for proactive health research in areas that could become the menace of society tomorrow, next week or in the next decade, and the need for more venues and vehicles for the translation of this knowledge for the betterment of all Canadians.

The CIHR Institute of Circulatory and Respiratory Health (ICRH) is committed to developing and offering research and training programs in areas of strategic importance that relate to the heart, lung, blood, brain (stroke), blood vessels, critical and intensive care, and sleep. During 2003/2004, ICRH and its partners launched broadly important strategic initiatives including those focused on tobacco use and nicotine addiction, global health, and the SARS epidemic. The ICRH-specific strategic initiatives launched in collaboration with the National Heart, Lung, and Blood Institute of the National Institutes of Health of the United States will allow researchers to examine ways to improve resuscitation outcomes, the management of thrombotic disorders and in vivo imaging techniques for the cardiovascular, pulmonary and hematopoietic systems. These pan-North American offerings will be followed by others.

ICRH recognizes that a strong, vibrant and productive circulatory and respiratory health research enterprise largely depends on the strength of its researchers and trainees. As such, ICRH continues to invest much time and resources towards developing the next generation of health researchers and in encouraging their mentors.

The National Research Forum for Young Investigators in Circulatory and Respiratory Health, a major training, mentoring and educational program of ICRH and its partners, should become a landmark event for aspiring circulatory and respiratory researchers. ICRH has also endeavoured to recognize the efforts of great Canadian and international leaders working in the area of circulatory and respiratory sciences through the offering of such awards like the ICRH Distinguished Lecture and Prize in Cardiovascular Sciences.

ICRH has made great strides in the arena of translating circulatory and respiratory health research knowledge into improved health for Canadians, more effective health services and products and a strengthened Canadian health care system. A Casebook of Knowledge Translation (KT) Strategies for Circulatory and Respiratory Diseases and Disorders is currently under development. ICRH continues to participate in and sponsor various events that aim to educate and inform the general public as to the importance and daily relevance of health research.

Progress made in the open competition cannot go unnoticed (see Appendix I). The open competition complements strategic offerings by preparing researchers to examine health research problems at a bigger scale and encouraging researchers to explore areas that are not necessarily the focus of strategic offerings, but that are important in expanding the frontiers of understanding circulatory and respiratory diseases and disorders. The open competition has always been the driving force behind the health research engine in Canada and is critical to the success of the enterprise as a whole. ICRH employs programmatic tools like the New Frontiers Program to assist researchers in their quest of being more successful in both the open and strategic competitions, and to mobilize people across disciplines, themes, geographies, and insights.

As you will read, ICRH and especially the research community has much to be proud of. ICRH could not have accomplished all that it has this past year without the generous commitment, in time and resources, of its many partners, champions, researchers, trainees and supporters. On behalf of everyone at ICRH, thanks to all for your continued encouragement and support of ICRH's mission to develop a national research agenda for the circulatory and respiratory sciences.

Cheers!

Bruce expensions

Bruce M. McManus, MD, PhD, FRSC Scientific Director CIHR Institute of Circulatory and Respiratory Health

### Who is ICRH?

#### **ICRH** Team



Arun Chockalingam Assistant Director Tel.: (604) 806-8932 Fax.: (604) 806-8935 achockalingam@mrl.ubc.ca



Karen Dewar Deputy Director, Program Delivery Tel.: (613) 941-4576 Fax.: (613) 954-1800 kdewar@clihr-irsc.gc.ca



Salima Harji Senior Project Officer Tel.: (604) 806-8658 Fax.: (604) 806-8935 sharji@mrl.ubc.ca



Elissa Hines Reimer Senior Associate Tel.: (613) 954-0544 Fax.: (613) 954-1800 ehinesreimer@cihr-irsc.gc.ca



Bruce McManus Scientific Director Tel.: (604) 806-8934 Fax.: (604) 806-8935 bmcmanus@mrl.ubc.ca



Melanie Train Administrator Tel.: (604) 806-8934 Fax.: (604) 806-8935 mtrain@mrl.ubc.ca

#### **CIHR Clinical Research Initiative**



John Cairns Project Leader Tel.: (604) 682-2344 Ext. 63280 Fax.: (604) 806-8935 jacairns@medd.med.ubc.ca



Annie Prud'homme Genereux Project Officer Tel.: (604) 682-2344 Ext. 63278 Fax.: (604) 806-8935 aprudhomme@mrl.ubc.ca

#### Contact information:

Institute of Circulatory and Respiratory Health Providence Health Care - University of British Columbia

> St. Paul's Hospital Room 553, Burrard Building 1081 Burrard Street Vancouver, British Columbia V6Z 1Y6

> > Tel.: 604-806-8934 Fax.: 604-806-8935 icrh@cihr-irsc.gc.ca

> > www.cihr-irsc.gc.ca

### **Institute Advisory Board**



Paul W. Armstrong Professor Department of Medicine University of Alberta Edmonton, Alberta



Peter Glynn
Health Care Consultant
Adjunct Professor
Department of Community Health
and Epidemiology, Queen's
University Chairman of the
Board, Institute for Clinical
Evaluative Sciences in Ontario
Kingston, Ontario



Graham Nichol
Associate Professor
Department of Medicine
University of Washington
Seattle, Washington



André Cantin (Chair) Professor Department of Medicine, Respiratory Division University of Sherbrooke Sherbrooke, Quebec



Frances Gregor Associate Professor School of Nursing Dalhousie University Halifax, Nova Scotia



Paul O'Byrne Professor Department of Medicine St. Joseph's Hospital McMaster University Hamilton, Ontario



Jacques de Champlain Professor Departments of Physiology and Medicine University of Montreal Montreal, Quebec



Antoine Hakim
Professor and Chair
Division of Neurobiology
Director, Canadian Stroke Network
University of Ottawa
Ottawa, Ontario



Grant Pierce
Professor and Director
Division of Stroke and Vascular Disease
St. Boniface General Hospital
Research Centre
University of Manitoba
Winnipeg, Manitoba



Roxanne Deslauriers (Vice-Chair) Director of Research Institute for Biodiagnostics National Research Council of Canada Winnipeg, Manitoba



Pavel Hamet
Professor
Department of Medicine
Director of Research
Centre hospitalier universitaire
de l'Université de Montréal (CHUM)
University of Montreal
Montreal, Quebec



Brian Rutt
Scientist, Imaging Research
Laboratories, Robarts Research Institute
Professor, Department of
Diagnostic Radiology and
Nuclear Medicine
University of Western Ontario



Dana Devine
Director of Research and
Development, Canadian
Blood Services
Professor, Department of
Pathology and Laboratory Medicine
University of British Columbia
Vancouver British Columbia



Kathryn King
Associate Professor
Heritage Population Health
Investigator
Faculty of Nursing
University of Calgary
Calgary, Alberta



Jack Siemiatycki Professor Département de médecine sociale et préventive University of Montreal Montreal, Quebec



Gregory Downey
Professor
Department of Medicine
University of Toronto
Toronto, Ontario

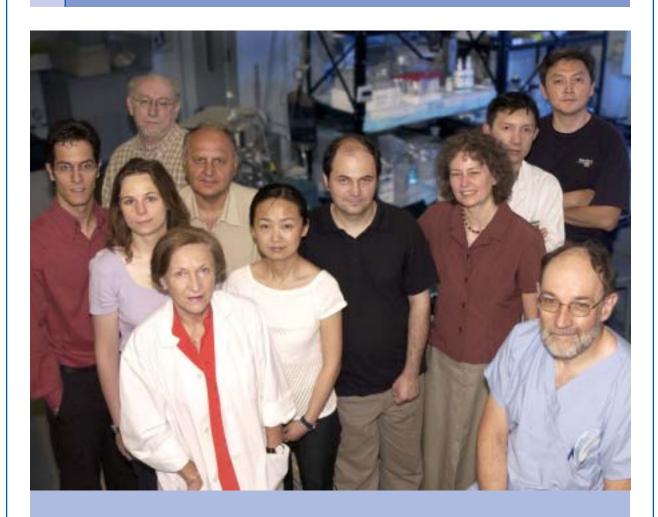


Peter Liu
Director, Heart & Stroke,
Richard Lewar Centre of Excellence
Heart & Stroke/Polo Chair
Professor, Departments of
Medicine and Physiology
University of Toronto
Toronto, Ontario



Verna Skanes Adjunct Professor Department of Immunology Memorial University of Newfoundland St. John's, Newfoundland and Labrador

## **Outstanding Research**



In Canada and the USA, cardiovascular diseases account for about 45% of all deaths. The most dramatic cause of these deaths is myocardial infarction (56%), that results in irreversible loss of cardiomyocytes and a deficit of cardiac function. A team of researchers led by Dr. Jolanta Gutkowska (bottom row, left) from the University of Montreal is examining whether this deficit can be counteracted by stimulating the differentiation of endogenous stem cells by oxytocin or cell replacement therapy. This research program is being funded through the ICRH Regenerative Medicine New Emerging Team Program.

ICRH is committed to developing and offering research programs in areas of strategic importance that relate to heart, lung, blood, brain (stroke), blood vessel, critical and intensive care, and sleep research. The process for the identification of these areas of strategic importance involves extensive consultations of the Institute Advisory Board members, the broader research community and partner organizations, as well as an analysis of current trends and needs in the area of health and health sciences in Canada.

# Strategic Initiatives Launched this Fiscal Year

A series of research priorities that were under development over the past 1-2 years, many in collaboration with voluntary, government and provincial organizations and agencies, were launched as strategic initiatives in 2003/2004.

Advancing the Science to Reduce Tobacco Abuse and Nicotine Addiction (Interdisciplinary Capacity Enhancement Grant). ICRH's contribution will focus on areas such as Aboriginal Peoples' health, determinants of use, harm reduction, integrated policy and program interventions, as well as sex differences and gender influences, as they relate to circulatory and respiratory health (see Appendix III).

Gender and Sex Determinants of Circulatory and Respiratory Health (Interdisciplinary Capacity Enhancement Grant, modified program to include operating funds). The relevant research areas include acute coronary syndrome, atherosclerotic disease risks (including metabolic syndromes), and lung disease (including airways disease and lung cancer).

Palliative and End of Life Care (New Emerging Team Grant). ICRH was open to receiving applications that fall under the breadth of this theme, but encouraged applications addressing research communication and decision-making strategies related to palliative and endof-life care issues, especially those related to congestive heart failure, stroke, and chronic obstructive pulmonary disorders.

Public Health and Health Care System Preparedness and Response to Severe Acute Respiratory Syndrome (SARS): Evaluation and Lessons Learned (Operating Grant). ICRH supported this important initiative following the SARS outbreak.

Global Health Research Pilot Project Grants (Launched under the auspices of the CIHR Global Health Research Initiative). This Request for Applications, launched in fall 2003, was designed to build research capacity by supporting innovative high-risk, pilot or feasibility research on ecological, technological, economic, political, and socio-cultural forces that influence health and/or major health and health systems problems that affect vulnerable populations in low-, middle- and high-income countries. ICRH provided support for one of the successful grants that focuses on populations in China (see Appendix III).

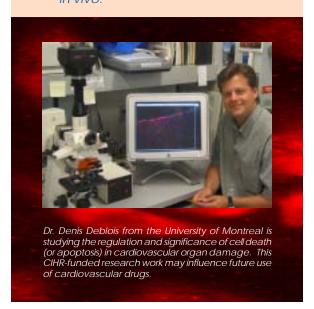




Through the Global Health Research Program Development and Planning Grants program, Drs. Jean Bourbeau and Jean-Paul Collet (bottom row, third from the left), together with Dr. Wang Chen, will develop a collaborative research program in China and Canada to optimize chronic obstructive pulmonary disease (COPD) and asthma management.

Canada-USA Initiatives. Following an historic meeting in June 2003 of representatives from ICRH, CIHR and the National Heart, Lung, and Blood Institute of the National Institutes of Health of the United States, joint initiatives were launched in three priority areas:

- ♦ Clinical Research Consortium to Improve Resuscitation Outcomes. This initiative will support regional centres in the US and Canada that will conduct multiple collaborative trials to aid rapid translation of promising scientific and clinical advances to improve resuscitation outcomes resulting from cardiopulmonary and traumatic arrest.
- ◆ Inflammation and Thrombosis. This initiative provides support for research on the interplay between inflammation and thrombosis, and encourages translational and preclinical studies for the development of anticoagulation agents for better management of thrombotic disorders
- ♦ Cellular and Molecular Imaging of the Cardiovascular, Pulmonary and Hematopoietic Systems. The focus of this initiative is the development and utilization of techniques that enable non-invasive cellular and molecular probes to image cellular and molecular targets and events in vivo.



#### **Ongoing Strategic Initiatives**

ICRH is supporting various research programs that were funded in previous fiscal years through Requests for Applications and that focused on areas of strategic importance to ICRH.

Gene-Environment Interactions in Circulatory and Respiratory Diseases. ICRH and the Heart and Stroke Foundation of Canada (HSFC) are currently supporting three interdisciplinary health research teams (IHRTs) in the area of gene-environment interactions in circulatory and respiratory diseases. In an effort to provide IHRTs with a forum to present and discuss their IHRT-related scientific work and to encourage linkages across the teams, ICRH and HSF co-sponsored and co-organized a "Gene-Environment Interactions Sciencefest", held on June 18, 2003 in Toronto, Ontario. This meeting was attended largely by representatives from the three teams co-funded by ICRH/HSF and other leading researchers working in the field.

ICRH/HSF also co-sponsored a workshop



Ms. Treena McDonald, is seen here addressing participants of the 2003 Gene-Environment Sciencefest, the objective of which was to encourage knowledge sharing and collaboration among the three ICRH/HSF-funded interdisciplinary health research teams working in the area of gene-environment interactions in circulatory and respiratory diseases.

entitled "Genetic and Environmental Determinants of Cardiovascular Diseases: A Mini-Symposium by IHRT Investigators" that was held in conjunction with the 2003 Canadian Cardiovascular Congress, October 25 to 29, 2003, in Toronto, Ontario. IHRT leaders had an opportunity to speak about the practicalities of examining

gene-environment interactions and the tools, techniques, processes and approaches they use to study such.

Regenerative Medicine and Nanotechnology. In 2003, ICRH worked collaboratively with the Institute of Neurosciences, Mental Health and Addiction and many other partner organizations to consolidate different research programs that were launched previously in the 2002/2003 fiscal year in the area of regenerative medicine under one large, multi-faceted research initiative. The Regenerative Medicine and Nanotechnology: Innovative Approaches in Health Research initiative was launched in June 2003.

Targeting the Basic Defect in Cystic Fibrosis: Request for Applications to Develop Novel Therapeutic Approaches (Also known as BREATHE: Basic Research and Therapy). The BREATHE initiative, led by the Canadian Cystic Fibrosis Foundation and launched in spring 2003, aims to hasten the translation of knowledge from basic to clinical studies by developing novel therapeutic approaches for altering the course of cystic fibrosis. In early 2004, partners in the BREATHE initiative approved funding for two large research teams.



A team of researchers led by Dr. Robyn Tamblyn from McGill University is working towards optimizing the management of chronic circulatory and respiratory diseases through the use of information technologies. This research program receives funding through one of ICRH's funding programs, Novel and Integrative Approaches to Assessment, Care and Management of Patients with Circulatory and Respiratory Diseases - New Emerging Team Grant. (Back row, from left to right: Dr. Laurel Taylor, Ms. Linda Wolwertz and Mr. Marc-Andre Larochelle. Front row, from left to right: Ms. Elizabeth Dufour and Ms. Yuko Kawasumi.)

#### **Developmental Initiatives**

ICRH continues to develop research areas of strategic importance to the Institute for future programmatic offerings.

New Frontiers Program (NFP). ICRH continued to use the NFP tool to help build the national research agenda for circulatory and respiratory health, and to enhance the effectiveness and activity of the research communities in solving a health research issue or problem (see Appendix III). For example, ICRH, in cooperation with The Lung Association, hosted an NFP workshop from October 19 to 23, 2003 in Toronto, Ontario, for the purpose of "Enhancing and Advancing the Respiratory and Critical Care Research Agendas of Canada" and increasing synergies among and between the two communities. This workshop was organized at the request of researchers from both the respiratory and critical care communities and was attended by approximately 40 researchers. A synthesis report has been posted on the CIHR website for input by the broader community. A final report will be generated later this year that will include input and recommendations from the broader communities. Working Groups are planned and will be charged with the development of initiatives, including those that are enabling (e.g., tools) and those that are destination (e.g., science and translation).

CIHR-INSalud Mexico Collaboration. In keeping with the Memorandum of Understanding that was signed between CIHR and the Institutos Nacionales de Salud (INSalud) in Mexico City in February 2002, both agencies have agreed to pursue the research theme of tuberculosis together. ICRH will provide in-kind support to this initiative by committing staff time and expertise to the development and launching of a research program.

# Outstanding Researchers in Innovative Environments

# The Strategic Training Initiative in Health Research: Training the Next Generation of Health Researchers



The FUTURE (Facilitating Unique Training Using Research and Education) Program, co-led by Dr. Heather Arthur from McMaster University and Dr. Kathryn King from the University of Calgary, aims to enhance the capacity of nurse scientists to contribute to the cardiovascular health



research agenda in Canada. Currently, there is a critical shortage of active cardiovascular nurse scientists in Canada. Cardiovascular nurse scientists are needed to test interventions across the trajectory of cardiovascular disease, from primary prevention through palliation, and in a variety of locales including the home and community. The FUTURE Program mentors aim to triple the current capacity within the next 5 years. (Photo on the left-hand side, from left to right: Mr. Paul Haswell, Ms. Karen Harkness and Dr. Heather Arthur. Photo on the right-hand side, from left to right: Ms. Theresa Green, Dr. Kathryn King, Ms. Cydnee Seneviratne and Dr. Dianne Tapp.)



The IMPACT (Integrated and Mentored Pulmonary and Cardiovascular Training) Strategic Training Initiative supports a group of young investigators spanning disciplines and themes in their investigation of genetic and environmental determinants of heart, lung and blood vessel disease. This research work will help build a better understanding of the mechanisms that lead to these diseases and facilitate the design of predictive, preventative and therapeutic interventions for patients. For example, Dr. Ryon Bateman, an IMPACT trainee, is examining why the body fails to utilize oxygen efficiently, especially

during periods of critical illness, and how this leads to multiple organ failure. Using a special fluorescent microscope, he is able to visualize the capillary network in the muscle and brain. This imaging modality allows for the modeling of oxygen transport in microscopic vessels during the progression of events such as the inflammatory response. It is hoped that this research work will lead to the development of novel interventions for improving the oxygenation of tissues in patients with critical illnesses.



The Membrane Proteins and Cardiovascular Disease - Strategic Training Initiative in Health Research led by Dr. Larry Fleigel from the University of Alberta has funded more than 10 trainees since its creation. Trainees have developed proficiency in a wide range of techniques including molecular cloning, DNA analysis, protein expression in tissue culture cells and in bacteria, etc. As well, researchers and trainees have published new insights on such topics as the structure and function of the Na+/H+ exchanger, a protein important in ischemia-reperfusion damage in heart muscle and cardiac hypertrophy. This

basic biomedical research will lead to improved, more effective biopharmaceutical agents for the prevention of ischemia-reperfusion injury commonly encountered during open heart surgery. (From left to right: Ms. Emily Slepkov and Dr. Larry Fleigel.)

ICRH is committed to training and nurturing the next generation of circulatory and respiratory health researchers as well as ensuring supportive and positive environments for seasoned and new investigators.

### National Research Forum for Young Investigators (YI) in Circulatory and Respiratory Health

The inaugural YI Forum, a major training and educational program of ICRH and its many partners and co-organized by the Institute of Cardiovascular Sciences, University of Manitoba and ICRH, will take place from May 6 to 8, 2004 in Winnipeg, Manitoba. ICRH and approximately 46 partners will sponsor the inaugural YI Forum, the focus of which is trainees and young investigators, including graduate students, post-doctoral fellows and junior faculty. This annual event is expected to be attended by over 500 individuals, many of whom will be trainees and young investigators. Trainees and young investigators will have the opportunity to deliver scientific presentations, to learn about current circulatory and respiratory research activity, and to interact and share ideas with many colleagues and mentors. Faculty will assist trainees and young investigators in moderation and facilitation of scientific sessions and contribute to workshops on a diverse range of topics. The 2<sup>nd</sup> annual YI Forum is scheduled to take place from April 28 to 30, 2005, in Winnipeg, Manitoba. Detailed information may be found at the Forum website (www.yiforum.ca).



Members of the Organizing Committee of the inaugural National Research Forum for Young Investigators (YI) in Circulatory and Respiratory Health are seen here following one of many planning meetings held in the yearleading up to this landmark event. (Back row, from left to right: Dr. Karen Dewar, Ms. Salima Harji, Dr. Bruce McManus, Ms. Elissa Hines Reimer and Dr. Pawan Singal. Frontrow, from left to right: Dr. Arun Chockalingam, Dr. Naranjan Dhalla, Ms. Kim Gaudreau and Dr. Jacques de Champlain.)



#### CIHR Clinical Research Initiative

ICRH is leading this large initiative on behalf of CIHR and its Institutes, the objective of which is to position Canada as an internationally recognized leader in clinical research. Dr. John Cairns, immediate past-Dean of Medicine at the University of British Columbia, and Dr. Annie Prud'homme Généreux were hired as Project Leader and Project Officer respectively, for the Initiative in spring 2004. They continue to meet with partner organizations and agencies to chart a path forward to position Canada as an international leader in clinical research, in consultation with Dr. McManus, who continues to serve as Scientific Director Champion.

#### Clinical Trials (CT) Training Program

This program is being led by CIHR Rx&D with assistance from ICRH staff and is linked to the CIHR Clinical Research Initiative. The program arose from a need for standardized and comprehensive training programs in the area of clinical trials and currently comprises two educational components.

CT Mentoring Program. This program is designed for individuals wishing to pursue a career in research. A Request for Applications was launched under this theme in January 2004, the objective of which is to develop clinical trialists who can conceptualize, design and implement randomized controlled trials. Investigators will learn how to initiate and conduct high quality randomized controlled trials from experienced mentors in highly active trial centres.

CT Certification Program. This program is designed for those individuals who wish to work in a support role within the setting of clinical trials. A special working group met in Toronto, Ontario, on January 21, 2004, to develop a core curriculum for the program. The curriculum will likely consist of two components, the first being offered in web-based format and comprising four modules (Good Clinical Practice, Regulatory Issues, Ethical Issues, and Data Management). The second component will include an interactive, face-to-face video conference session. The expected rollout date for the curriculum is fall 2005. ICRH staff continue to support the development of this educational program.

#### Global and International Health

ICRH staff have dedicated much time to the global health research enterprise by way of sharing knowledge and expertise with the intention of improving the general health and well-being of the global population.

World Heart Federation, Council on Epidemiology and Prevention, 36th Ten-Day International Teaching Seminar on Cardiovascular Disease Epidemiology and Prevention, July 13 to 24, 2003, Victoria, British Columbia. ICRH staff contributed to the organization and planning of this training program and offered expertise in curriculum development and teaching time.



Students of the World Heart Federation, Council on Epidemiology and Prevention, 36th Ten-Day International Teaching Seminar on Cardiovascular Disease Epidemiology and Prevention are seen here during one of the many teaching sessions offered. This Seminar was hosted on Vancouver Island, especially through the efforts of Dr. Arun Chockalingam.

The 5<sup>th</sup> International Heart Health Conference, June 13 to 16, 2004, Milan, Italy. ICRH is a sponsor of this Conference, the theme of which is "Positioning Technology to Serve Global Heart Health." ICRH staff are assisting with the planning and organization of the core program, including six symposia at the Conference.

Cardiovascular Epidemiology Training Program in Sub-Saharan Africa, October 2004, Accra, Ghana. ICRH staff members are assisting with the development of the curriculum for this Training Program.

# Quality Assurance (Benchmarking) Study

This study was commissioned by the ICRH in fall 2002, to identify the processes that influence quality assurance in university-based basic biomedical research laboratories. The study employed a survey tool to assess how exemplary laboratories and organizations proactively incorporate these processes into their research programs to foster a safe, efficient, and productive research and learning environment. The results of this study as well as secondary research findings will be collated into various articles to be submitted to journals for publication and for distribution to the broader community. These publications will serve as guides for laboratories to foster similar environments.

# ICRH Distinguished Lecture and Prize in the Cardiovascular Sciences

Each year, this award is made to an outstanding researcher from across the spectrum of basic, clinical, health services and policy, and population health themes, for his or her contributions to the advancement of cardiovascular sciences. In 2003, Sir Richard Peto, from the University of Oxford, Oxford, was awarded this Prize and was invited to deliver a special address at the 2003 Canadian Cardiovascular Congress held in Toronto, Ontario. Sir Peto delivered an address on "Halving Vascular Mortality in Middle Age" on October 28, 2003.



Sir Richard Peto, recipient of the 2003 ICRH Distinguished Lecture and Prize, is seen here delivering a special address at the 2003 Canadian Cardiovascular Congress.

### Dr. Andres Petrasovits Fellowship Award in Cardiovascular Health Policy Research

This program, launched in October 2003 by ICRH and the Heart and Stroke Foundation of Canada, provides one special award in the area of cardiovascular health policy research in memory of Dr. Andres Petrasovits, a prominent Canadian researcher who initiated the International Heart Health Movement. Dr. Petrasovits dedicated his entire adult life while working at Health Canada, until his death in July 2001, to the creation and implementation of the Canadian Heart Health Initiative that continues to provide much needed provincial cardiovascular baseline information for each of the 10 provinces. The results of this program will be announced in June 2004.



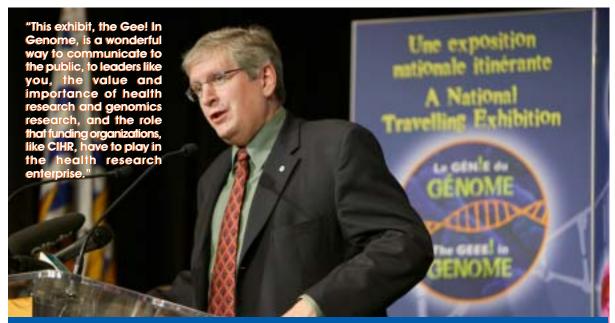
Dr. Andres Petrasovits, seen here, dedicated his life to the creation and implementation of the Canadian Heart Health Initiative that continues to provide much needed provincial cardiovascular baseline information. He died in July 2001.

# Strategic Training Initiative in Health Research (STIHR)

ICRH continues to use the STIHR tool as a mechanism to train the next generation of circulatory and respiratory researchers. In April 2003, ICRH began funding seven new programs, many of which are co-supported by the Heart and Stroke Foundation of Canada (see Appendix III). The programs are focused on diverse aspects of heart, lung and blood research training.



## **Effective Partnerships and Public Engagement**



Dr.Bruce McManus, Inaugural Scientific Director, CIHR Institute of Circulatory and Respiratory Health, is seen here making an address during the opening ceremonies of the Gee! In Genome Exhibit at Science World, the British Columbia host of the traveling exhibit.



Colleagues from ICRH, CIHR and NHLBI watch as Dr. Bruce McManus, Scientific Director, ICRH, and Dr. Claude Lenfant, Director, NHLBI, sign agreements on June 11,2003 in Bethesda Maryland to develop three collaborative research programs. This photo was kindly provided by the NHLBI (Photographer: Ms. Miriam Spiessbach). (Back row, from left to right: Dr. Deborah Beebe, Dr. Stephen Mockrin, Dr. Karen Dewar, Dr. Tracey Hoke, Dr. Charles Peterson, Ms. Elissa Hines Reimer, Dr. David Brener and Dr. Carl Roth. Front row, from left to right: Dr. Claude Lenfant and Dr. Bruce McManus.)

ICRH is committed to working with its many partners in the identification of research themes requiring attention by the research community, the development and offering of research programs in areas of strategic importance, and most importantly, the creation of a national research agenda for the circulatory and respiratory sciences. ICRH endeavours to promote and communicate the importance of this research to the general population and educate them about the outstanding achievements and contributions of Canadian researchers.

#### Partners Forum (PF)

Each year, ICRH brings together 30-50 representatives from partner agencies and organizations with the long-term objective of building an integrative national research agenda for circulatory and respiratory health, supported by a robust research environment, and with a clear vision that embraces the best of health for all Canadians.

Partners Forum III, April 27 to 28, 2003, Ottawa, Ontario. The objectives of PF III included networking and sharing, learning about the potential impact of databases on research and related ethical/ privacy issues, knowledge cycles and clinical research, identification of opportunities for joint action and celebration of past successes. Participants identified three priority issues namely 1) how to enhance research utilizing existing databases; 2) knowledge synthesis; and 3) increasing our understanding of the knowledge cycle and how to implement it. In an effort to respond to these priority issues, ICRH has embarked on developing a "Casebook of Knowledge Translation (KT) Strategies for Circulatory and Respiratory Diseases and Disorders: Lessons Learned in KT" (discussed below). ICRH will also lead the formation of working groups charged with creating a framework to maximize the use of existing databases and developing a systematic and standardized process for synthesizing information.

ICRH awarded its first annual ICRH Creative Partnership Award at PFIII, the purpose of which is to recognize individuals from partner organizations and agencies who facilitate, promote and develop effective and meaningful partnerships in the area of circulatory and respiratory sciences. In 2003, Ms. Jennifer Gee, Manager of Research, Heart and Stroke Foundation of Canada, was recognized for her outstanding contributions in the area of partnership development.



ICRH staff are seen here awarding Ms. Jennifer Gee, Manager of Research at the Heart and Stroke Foundation of Canada, the 2003 ICRH Creative Partnership Award. (From left to right: Ms. Kim Gaudreau, Ms. Salima Harji, Dr. Bruce McManus, Ms. Jennifer Gee, Ms. Elissa Hines Reimer and Dr. Arun Chockalingam.)

Partners Forum IV: Practical Partnership Tools for Knowledge Translation (KT), April 25 to 26, 2004, Vancouver, British Colum**bia.** The purpose of PF IV is to continue fostering sustainable, dynamic ICRH partnerships with a focus on increasing knowledge about and understanding of KT, the sharing of lessons learned and the development of practical tools for supporting KT in the research community and among partners. ICRH will introduce several concepts and tools for discussion by and feedback from partners, including a draft KT Casebook and Partnership Assessment Tool. Once finalized, the various tools will be translated, posted on the ICRH website and distributed throughout our community.

#### Collaboration with the National Heart, Lung, and Blood Institute (NHLBI), the National Institutes of Health (United States)

Since early 2001, ICRH and NHLBI have discussed possible avenues and areas for joint research initiatives that would facilitate, enable and enhance cross-border collaborations.

Enhancing Canada-United States Collaboration in Circulatory and Respiratory Health Research: Special Requests for Applications (RFA). In the summer of 2003, ICRH participated in the development and implementation of three NHLBI-led RFA including:

- Cellular and Molecular Imaging of the Cardiovascular, Pulmonary, and Hematopoietic Systems,
- Inflammation and Thrombosis, and
- Clinical Research Consortium to Improve Resuscitation Outcomes.

All competitions were open to researchers in Canada and the United States. ICRH staff are actively involved in the management of these initiatives. ICRH has also engaged additional partners in support of successful Canadian applications. The Heart and Stroke Foundation of Canada will provide support to applicants that are responsive to their mandate. ICRH is working with other government departments to support successful regional centres under the Resuscitation Outcomes initiative.

Resuscitation Sciences Symposium (ReSS), held in conjunction with the Annual American Heart Association Scientific Sessions, November 7 to 10, 2004, New Orleans, Louisiana. ICRH will co-sponsor this symposium with the NHLBI and the American Heart Association. It is anticipated that all researchers and professionals working in this field will benefit from the research sessions offered at this meeting.

#### Raising Awareness of the General Public

ICRH continues to support events that increase awareness in the general public of the value and importance of health research as well as aim to improve health behaviours in the general public.

Food for Health Exhibit, March 2006. ICRH, a sponsor of this Exhibit, is offering input into key messages that relate to diet and heart disease.

4th Annual Public Heart Health, June 12, 2004, Winnipeg, Manitoba. ICRH will sponsor this event, the purpose of which is to educate the general public about risk factors for cardiovascular disease and promote cardiovascular health in the general population.

Gee! in Genome Exhibit, October 2, 2003 to January 5, 2004, Vancouver, British Columbia. ICRH was a sponsor of this traveling exhibit when it was in Vancouver, the purpose of which is to connect members of the public with the scientific community and develop the interest of youth in careers in science and technology. ICRH was featured in a short promotional video that was included at the end of one of the exhibit centerpieces, "How to Build a Human: Predictor", a BBC/TLC co-production.

#### **Media Coverage**

ICRH staff, in cooperation with staff from CIHR communications, continue to promote newsworthy CIHR-funded research in the media community.

The Enhanced Feedback for Effective Cardiac Treatment (EFFECT) Study. The results of this study, led by Dr. Jack Tu from the Institute for Clinical Evaluative Sciences (ICES), and made possible through the Canadian Cardiovascular Outcomes Research Team (CCORT) grant, were publicized in a press conference on January 23, 2004, in Toronto, Ontario. ICRH staff participated in and contributed to the press conference. The press conference was covered by major Canadian television networks including CBC, CTV and Toronto Global. Dr. McManus was approached by numerous media outlets to comment on the implications and importance of the study. The media coverage attributed to this study put ICRH in third spot behind the CIHR Institutes of Infection and Immunity, and Nutrition, Metabolism and Diabetes with respect to CIHR's volume of media coverage in 2003/2004.

## **Translating Health Research into Action**



Participants of Partners Forum III are seen here during the workshop component of the Forum discussing such things as opportunities and challenges in the area of knowledge translation and the need for a knowledge translation strategy in the area of circulatory and respiratory sciences. (From left to right: Dr. Kent Stobart, Dr. Carolyn Ross, Dr. Irvin Myers, Ms. Valoree McKay and Dr. Arun Chockalingam.)

ICRH is committed to developing a knowledge translation strategy (KT) in the area of circulatory and respiratory sciences and ensuring that circulatory and respiratory research is translated into improved health for Canadians, more effective services and products and a strengthened health care system.

### Casebook - Strategies for Circulatory and Respiratory Diseases and Disorders: Lessons Learned in Knowledge Translation

Participants of Partners Forum III (discussed above) identified the need for a tool to educate stakeholders about KT as well as the state of KT in the area of circulatory and respiratory diseases and disorders. It was felt that a KT Casebook, composed of KT successes and failures, could assist in promoting KT activities in the circulatory and respiratory community. As well, the Casebook could serve as a framework for future discussions about the opportunities and challenges that researchers face in the area of KT. Members of the ICRH research community will contribute to the Casebook.

#### **Workshop Support**

ICRH has supported various workshops to further KT activities in the area of circulatory and respiratory health.

2004 Summer Institute: Negotiating the Shoals of Applied Research in Population and Public Health and Health Services and Policy Research, June 12 to 16, 2004, Whistler, British Columbia. ICRH will sponsor this unique training opportunity that brings together researchers, students, and decision-makers from across Canada and a variety of health-related disciplines to talk about KT in the context of population and public health and health services and policy research.

Technology Enabled Knowledge Translation Workshop, March 27 to 28, 2003, Vancouver, British Columbia. This workshop examined the use of information and communication technologies in knowledge transfer, exchange, and dissemination. The work from this workshop

was published in the Canadian Medical Association Journal. A synthesis report is being distributed to the community for further input and an action plan is currently under development with assistance from ICRH staff.



### **Organizational Excellence**

ICRH staff are committed to ensuring that the Institute and the research programs it administers operate in a transparent, efficient and effective manner and accordingly, have created tools, processes and venues for ensuring such

# Evaluation of ICRH-Funded Research and Training Programs

ICRH has endeavoured to monitor the performance of and provide guidance to ICRH-funded programs in an effort to ensure continuous progress.

Gene-Environment Interactions Reporting and Advisory Session, June 19, 2003, Toronto, Ontario. ICRH and the Heart and Stroke Foundation of Canada co-sponsored this interactive meeting to assure that scientific progress is made by the three gene-environment interactions Interdisciplinary Health Research Teams (IHRTs) individually and collectively, and to develop a common understanding of challenges and accountabilities that are shared by funders and scientists. Prior to the meeting, IHRTs were required to complete a Status Report and Performance Measures Survey. An External Advisory Panel comprised of Drs. Paula Gregory, Michael Hayden, and Stephen Young provided input into future directions and offered reflections on the strengths and weaknesses of each of the research programs, based on oral presentations made by each team. IHRT leaders found this feedback to be extremely valuable and have since made enhancements and improvements to their research programs. A similar session is planned for October 2004.

Chronic Disease New Emerging Team (NET) Grants. In cooperation with partners, NET leaders were required to complete a Performance Measurement Survey in the fall of 2003 wherein they outlined progress made in such areas as creation and development of new competitive

research teams, development of multidisciplinary and cross-thematic research, and training and establishment of new investigators. ICRH staff and partners are formalizing a process for the midterm review of these programs that is scheduled to begin in the summer of 2004.

Strategic Training Initiative in Health Research (STIHR). ICRH staff contributed to the development of the Strategic Training Program Grant Progress Report that is scheduled to be implemented in the summer of 2004.

New Frontiers Program (NFP). NFP groups were required to submit a progress report in 2003 wherein they provided information on such things as grants and awards received as a result of their NFP work, ongoing activities, etc.. ICRH staff also reviewed the NFP synthesis report that was submitted by each group following their workshop and compiled information on gaps, recommendations and how ICRH is addressing these recommendations.

**Evaluation of the Institutes.** ICRH staff members have been engaged in discussions with corporate staff who are leading the development of an evaluation strategy for the Institutes.

#### **Institute Advisory Board**

ICRH is guided by an Institute Advisory Board (IAB) of leaders who work in the area of circulatory and respiratory health and volunteer their precious time to offer advice and recommendations about ICRH activities and programs. IAB members who completed their term in the 2002/2003 fiscal year were replaced with Drs. Paul Armstrong, Peter Glynn, Kathryn King, Graham Nichol and Brian Rutt during the 2003/2004 fiscal year. We thank the out-going members for their continued support and commitment and welcome the new members. This past fiscal year, the IAB met face-to-face three times and met three times by teleconference.

#### Management

ICRH is committed to managing the IAB, ICRH staff and ICRH programs effectively and has established various mechanisms for such. These include, but are not limited, to the following:

- ICRH recognized IAB members who completed their terms in 2003 and welcomed new members following nomination and renewal processes that were led and facilitated by
- In an effort to encourage cross-talk among Institutes, ICRH held a joint IAB meeting with the CIHR Institute of Cancer Research on October 22, 2003, in Toronto, Ontario.
- ICRH staff often invited IAB members to attend meetings, conferences and workshops related to their area of expertise on behalf of ICRH in an effort to ensure that ICRH's interests and activities are communicated to the broader community.
- ICRH staff met regularly to discuss topics such as progress of different projects and areas of opportunities and need within the community.
- ICRH staff met one-on-one with the Scientific Director on a regular basis to discuss such issues as personal development and growth, performance and progress.
- ICRH staff improved their "Workshop Support Mechanism" for researchers, groups, etc., wishing to apply to ICRH for workshop funds.
- The IAB and Institute staff met with the Heart and Stroke Foundation of Canada - Research Policy and Planning Advisory Committee (RPPAC) on October 23, 2003, to discuss current activities and possible future directions.



In an effort to encourage cross-talk among Institutes, ICRH participated in a joint IAB meeting with the CIHR Institute of Cancer Research on October 22, 2003, in Toronto, Ontario. Scientific Directors and Institute Advisory Board Chairs for both Institutes are seen here leading the meeting. (From left to right: Dr. Bruce McManus, Dr. André Cantin, Dr. Heather Bryant and Dr. Phil Branton).

#### **Communications Efforts**

In an effort to maintain communication linkages both within ICRH and outside, ICRH staff have established various venues and tools for such. These include, but are not limited, to the following:

- In co-operation with relevant partners, ICRH staff prepared press releases that highlighted newsworthy ICRHrelated events, research and training programs, funding announcements,
- In an effort to promote ICRH in the research and broader community, ICRH has distributed promotional materials at ICRH-sponsored meetings, public fora, conferences, etc., and included the CIHR logo on websites related to ICRH-sponsored meetings, etc.
- ICRH staff regularly communicate by e-mail with members of the circulatory and respiratory research community (there are ~2,500 entries in the ICRH list-serve).
- ICRH staff contributed to CIHR promotional materials (e.g., Return on Investment).
- ICRH staff posted documents, reports, meeting minutes, announcements, etc., on the ICRH website.
- ICRH staff routinely invited CIHR/ ICRH-funded researchers and trainees and representatives from partner agencies and organizations to face-to-face meetings of the IAB to share their perspectives on how they

- are progressing in a CIHR world and to discuss opportunities and challenges in their community (e.g., Innovation Speakers, special guests) (see Table 1).
- ◆ CIHR corporate staff were invited to attend ICRH meetings, including IAB meetings, to ensure that ICRH staff work effectively with such branches as Program Delivery, Communications, etc.
- ◆ The Scientific Director and Assistant Director participated in and contributed to meetings, conferences, public forums, etc., throughout the year to maintain contact with ICRH's community of researchers and partners, and to increase awareness of the challenges and opportunities facing researchers and trainees within ICRH (see Table 2).

#### **Committee Involvement**

The ICRH directorship, staff and IAB members served on several CIHR committees and working groups throughout 2003/2004, with involvements such as:

- ◆ CIHR Communications Team. To share information and to develop and implement marketing and communication strategies for the organization (Salima Harji).
- ♦ CIHR Working Group on Clinical Research. To ensure that CIHR meets the evolving needs of clinical research at a programmatic level and to ensure that CIHR works effectively with all stake-holder groups in developing short-, intermediate- and long-term plans for optimal training and retention of clinician-scientists and in the furtherment of clinical research in the diversity of Canadian health research environments (Bruce McManus).
- Committees to develop an evaluation framework for scientific directors and a common evaluation framework for Institutes (Arun Chockalingam)
- Ethics Advisory Committee. To develop two to three strategic priorities for research in ethics, identify potential research questions and knowledge trans-

- lation components and establish a process for the further development of the CIHR strategic plan for research in ethics (e.g., consultation, linkages with Standing Committee on Ethics' initiatives in the area of capacity building) (Arun Chockalingam and Verna Skanes).
- ♠ Institute Roundtable. To share information, processes and policies of common concern across the 13 Institutes in collaboration with portfolio branches (Arun Chockalingam).
- Networks for Health Innovation Working Group. To develop the concept and criteria for proposed Networks of Health Innovation (Bruce McManus).
- President's Voluntary Sector Committee. To maximize the effectiveness of working relationships and partnerships between CIHR and the voluntary sector and to, in turn, increase the benefits of health research (Bruce McManus).
- ◆ Study Committee on the Privacy, Confidentiality and Conflict of Interest Issues of Peer and Relevance Review at CIHR. To examine the legal and ethical regulations in place and recommend the necessary modifications or additions in order to prevent improprieties or misunderstandings and the appearance of improprieties or misunderstandings concerning the impartiality and the integrity of peer review (Arun Chockalingam and Karen Dewar).
- Web Content Manager Committee. To provide leadership, advice and recommendations regarding CIHR's Web Service Activities (Kim Gaudreau).
- Web Steering Committee. To ensure the successful implementation of the revised information architecture and the complete re-design of the CIHR Internet site (Arun Chockalingam and Kim Gaudreau).

## **Innovation Speakers**

20th IAB Meeting June 5, 2003 Mont Orford, Quebec Dr. Jean-Paul Praud, Professor, Department of Pediatrics, University of Sherbrooke, Sherbrooke, Quebec

Dr. Eric Rousseau, Professor, Department of Physiology and Biophysics, University of Sherbrooke, Sherbrooke, Quebec

23<sup>rd</sup> IAB Meeting October 23, 2003 Toronto, Ontario

Dr. Tara Haas, Assistant Professor, School of Kinesiology and Health Science, York University, Toronto, Ontario

Mr. Jason Pole, PhD Candidate, Department of Public Health Sciences, University of Toronto, Toronto, Ontario

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# Exemplary talks/visits made by the Scientific Director\* or Assistant Director\*

Enteroviral Infections, President's Symposium, Annual Meeting of the American Society for Investigative Pathology, San Diego, California, April 11-14, 2003\*

Quality Management in Basic Biomedical Research Laboratories: Does It Happen? Who Does It? How and Why?, Lunch and Lounge Series, iCAPTUR4E Centre, Vancouver, British Columbia, April 17, 2003\*

Are All Peer-Reviewed Panels the Same? How Does it Affect Researcher Applicants? Lessons from Thorngate, Lunch and Lounge Series, iCAPTUR\*E Centre, Vancouver, British Columbia, April 24, 2003\*

Welcoming Address, Partners Forum III, Ottawa, Ontario, April 26-28, 2003\*

Can the Duel Between Virus and Host Be Stopped? Emerging Insights into Enteroviral Pathogenesis, Langer Lecture, Annual Scientific Day of the Clinician Investigator Program, Institute of Medical Science, Toronto, Ontario, May 1, 2003\*

CVD Prevention Guidelines in Africa, International Conference for Cardiovascular Disease Control and Prevention in Africa, Brussels, Belgium, May 10-12, 2003\*

What to Do When Your Grant is Rejected?, Grantscrafting Workshop, Research Education, Vancouver Hospital Health and Sciences Centre, Vancouver, British Columbia, May 26, 2003\*

Importance of Networks, Fractals and Power Law for Cardiorespiratory Science, MedMath 2003 Symposium, University of Manitoba, Winnipeg, Manitoba, May 28-30, 2003\*

Enteroviral Heart Disease – The Problem Still Begging a Solution, University of Sherbrooke Grand Rounds, Sherbrooke, Quebec, June 6, 2003\* Institute Round Table, Outcomes on "Technology Enabled Knowledge Translation Workshop", Ottawa, Ontario, June 10-11, 2003\*

Symposia Chair, Inflammatory Heart Diseases and Cardiac Failure, Canadian Federation of Biological Societies 46th Annual Meeting, Toronto, Ontario, June 11-14, 2003\*

Life and Death Signalling in Enteroviral Heart Disease, Plenary Lecture, Canadian Federation of Biological Societies 46th Annual Meeting, Toronto, Ontario, June 11-14, 2003\*

Co-Chair, Program Committee, Gene Environment Sciencefest, Toronto, Ontario, June 18-19, 2003\*

Dissecting the Genetic and Environmental Basis of Cardiovascular Diseases: What's Happened, What's Possible?, Highlights in Medicine 2003, 50th Anniversary Scientific Conference, University of Saskatchewan, Saskatchewan, June 23-29, 2003\*

Charting One's Future: What, When and Where to Apply, Lunch and Lounge Series, iCAPTUR4E Centre, Vancouver, British Columbia, July 10, 2003\*

Member, Scientific Advisory Boards of the International Academy of Cardiology and the 3<sup>rd</sup> World Congress on Heart Disease, Washington, DC, July 12-15, 2003\*

Welcoming Remarks, World Health Federation 36th International Teaching Seminar on Cardiovascular Disease Epidemiology and Prevention, Victoria, British Columbia, July 13, 2003\*

The iCAPTUR4E Centre New Hope for Hearts and Lungs, Heart & Stroke Foundation of BC & Yukon High School Program, Vancouver, British Columbia, July 16, 2003\*

Global Health Research Opportunities for Canadians, World Health Federation 36th International Teaching Seminar on Cardiovascular Disease Epidemiology and Prevention, Victoria, British Columbia, July 16, 2003#

Chair, Student Summer Research Day, St. Paul's Hospital, Vancouver, British Columbia, August 14, 2003\*

Transplant Vascular Disease: Role of Lipids and Proteoglycans, Canadian Vascular Biology Working Group Meeting, Vancouver, British Columbia, August 14-16, 2003\*

From Gene Expression Profiles to Biological Validation in Enteroviral Heart Disease, Mendel Symposium: Genes and the Heart, International Academy of Cardiovascular Sciences, Brno, Czech Republic, August 26-29, 2003\*

Enteroviral Heart Disease: Progress in Understanding Mechanisms and Possible Therapies, Providence Health Care Grand Medical Rounds, St. Paul's Hospital, Vancouver, British Columbia, September 3, 2003\*

Patient Education: Issues, Problems and Solutions, Presented at the San Rafael Hospital Medical Grand Rounds, Milan, Italy, September 5, 2003#

Can Microarrays Help Solve Important Questions in Coxsackievirus-Related Pathogenesis?, Faculty of Medicine, University of Alberta, Edmonton, Alberta, September 18, 2003\*

Think Tank on "Health Disparities", CIHR Institute of Gender and Health, Ottawa, Ontario, September 21-23, 2003#

The iQ Engine – A Data Integration Tool for the Assessment of Regurgitant Heart Valves, 7th Annual Scientific Meeting, Heart Failure Society of America, Las Vegas, Nevada, September 21-24, 2003\*

An Outsider's View of the Program, The Cardiovascular Proteomics Initiative: Defining a New Frontier in Cardiovascular Research Workshop, 7th Annual Scientific Meeting, Heart Failure Society of America, Las Vegas, Nevada, September 21-24, 2003\*

The Gee! in the Genome Exhibit, Opening Ceremonies, Genome BC, Science World, Vancouver, British Columbia, October 2, 2003\*

Participated in the "Action Plan" Development for the Canadian Stroke Network, Ottawa, Ontario, October 7, 2003\*

The iCAPTURE Centre and Information Management Challenge, University Health Network, Toronto, Ontario, October 21, 2003\*

How to Write a Successful Grant Application, Post Graduate Day, Canadian Cardiovascular Congress, Toronto, Ontario, October 25, 2003\*

Co-Organizer, Scientific Session, Canadian Cardiovascular Congress, Toronto, Ontario, October 25-30, 2003\*

Genetic and Environmental Determinants of Cardiovascular Diseases, Symposium, Canadian Cardiovascular Congress, Toronto, Ontario, October 28. 2003\*

VEGF, Vascular Permeability, Angiogenesis, Thrombosis, and Atheromatous Disease – Are They Related?, Canadian Society of Atherosclerosis, Thrombosis and Vascular Biology, Scientific Session, Canadian Cardiovascular Congress, Toronto, Ontario, October 28, 2003\*

An International Leadership Role in Clinical Research – How Close Are We?, Vascular Biology Group, Robarts Research Institute, University of Western Ontario, London, Ontario, October 29, 2003\*

Potential Opportunities for Clinical Trials Training Program in Canada, Keynote address to the Society of Clinical Research Professionals of British Columbia, Vancouver, British Columbia, October 29, 2003\*

Advisory Committee Meeting, Heart and Stroke Foundation of Ontario, Toronto, Ontario, November 4-6, 2003#

Welcoming Address, Resuscitation Science Symposium Forum, Orlando, Florida, November 8-9, 2003\*

World Hypertension League Executive Board Meeting and Strategic Planning Meeting, World Health Organization, Geneva, Switzerland, November 18-22, 2003\*

Knowledge Translation and Need for Clinical Research and Potential ICRH-CIHR Funding Opportunities for the Canadian Cardiovascular Outcomes Research Team, National Team Meeting, Toronto, Ontario, November 20, 2003\*

Clinician Scientist Cross-cutting Initiative and Opportunity of Partnership between ICRH and INMHA, Institute of Neurosciences, Mental Health and Addiction (INMHA) Institute Advisory Board Meeting, Toronto, Ontario, November 21, 2003\*

Overview of New Frontiers Program, National Cardiac Registry Meeting, Toronto, Ontario, November 22, 2003\*

The Power of Failure, Mentoring Dinner, UBC Office of the Vice-President Research, Vancouver, British Columbia, November 26, 2003\*

The Post-Genomic Opportunities and Challenges for the Physician and the Physician-Researcher in the USA and Canada, Keynote Speaker, IBM Bioinformatics and Information Based Medicine from Pharmacogenomics to Personalized Medicine Conference, San Francisco, California, December 7-9. 2003\*

International Workshop on Cardiovascular Health and Chronic Disease Epidemiology for Sub-Saharan Africa, Accra, Ghana, December 7-12, 2003#

Major Epidemiologic Concepts, UBC Cardiology Fellows' Directed Reading Program, Vancouver, British Columbia, January 8, 2004\*

Types of Epidemiologic Studies, UBC Cardiology Fellows' Directed Reading Program, Vancouver, British Columbia, January 15, 2004

Goals for Setting-Up a Clinical Trials Accreditation Program, Advisory Committee for Clinical Trials Training Program, Toronto, Ontario, January 21, 2004\*

Advisory Committee Meeting, Heart and Stroke Foundation of Ontario, Toronto, Ontario, January 22-23, 2004#

National Press Conference on Enhanced Feedback for Effective Cardiac Treatment (EFFECT) Study, Toronto, Ontario, January 23, 2004<sup>#</sup> International Society of Hypertension Meeting (ISH), São Paulo, Brazil, February 15-19, 2004<sup>#</sup>

Global Control of Hypertension, World Hypertension League Symposium at the ISH, São Paulo, Brazil, February 16, 2004#

Heart Valves – Normal, Abnormal and Infected, Table Clinic Program, American Academy of Restorative Dentistry, Chicago, Illinois, February 22, 2004\*

Microbial Prophylaxis and Resistance: Challenges and Solutions, Projected Clinic Program, American Academy of Restorative Dentistry, Chicago, Illinois, February 23, 2004\*

Transplant Vascular Disease, Cardiology Research Rounds, Providence Health, Vancouver, British Columbia, February 24, 2004\*

Milan Declaration - Positioning Technology to Serve Global Heart Health, Vancouver, British Columbia, February 25-27, 2004

Hypertension and Stroke: Population Patterns, Risk Factors and Prevention, UBC Cardiology Fellows' Directed Reading Program, Vancouver, British Columbia, March 5, 2004#

Cardiovascular Pathology in the Department of Pathology: Princess or Cinderella?, Forum on Cardiovascular Pathology Training, Society for Cardiovascular Pathology, Annual Meeting, United States and Canadian Academy of Pathology, Vancouver, British Columbia, March 6, 2004\*

CIHR: Making the Blueprint Live, Providence Health Research Day, Providence Health, Vancouver, British Columbia, March 12, 2004\*

CVD Issues in Specific Population Groups, UBC Cardiology Fellows' Directed Reading Program, Vancouver, British Columbia, March 12, 2004#

Will Santa Claus Make it to Valentine's Day?, Community Womens' Church Group, North Vancouver, British Columbia, March 13, 2004\*

Transplant Vascular Disease, Medical Grand Rounds, Department of Medicine, University of Saskatchewan, Saskatchewan, March 24, 2004\*

Mining the Genes of the Virus-Infected Heart: 'Is there Gold in them Thar Hills?', Special Visiting Lecture, University of Saskatchewan, Saskatchewan, Saskatchewan, March 24, 2004\*

# The Big Picture – Estimates of CIHR Funding of Circulatory and Respiratory Health Research

The following table reflects an estimate of CIHR's support of circulatory and respiratory health research from the 2000/2001 fiscal year to the 2003/2004 fiscal year only. The numbers were generated by searching the CIHR database for grants and awards falling in the area of circulatory and respiratory health using the search criteria described below.

1.The following English key words were used to search various fields of the CIHR database (e.g., "All Research Classes," "All Research Areas," "Funding Keyword," and "Research Project Title"):

anaemia OR anemia OR arrhythmia OR asthma OR atherosclerosis OR blood OR cardiology OR cardiovascular OR cardio vascular OR cardio-vascular OR circulation OR clotting OR coronary OR hematology OR heart failure OR cardiac OR hypertension OR lung OR pulmonary OR myocardial infarction OR respiration OR stroke OR thrombosis AND (Not cancer) AND (Not leukaemia) AND (Not leukaemia)

2.The following corresponding French key words were used to search the same fields of the CIHR database:

anémies OR arythmies OR asthme OR athérosclérose OR sang OR cardiologie OR cardio-vasculaire OR cardiovasculaire OR circulation OR coagulation OR coronaire OR infarctus OR hématologie OR insuffisance cardiaque OR cardiaque OR hypertensine OR poumon OR pulmonaire OR infactus du myocarde OR respiration OR accident vasculaire cérébral OR AVC OR thrombose AND (Not cancer) AND (Not leucémie)

3.The database field called "Institute – Priority" was searched for any grant or award holder who indicated on their application to CIHR that the project was related to the mandate of the CIHR Institute of Circulatory and Respiratory Health at either the primary or secondary level.

This search was performed in June 2004. Once the search was completed, the data set was not reviewed for false positives or validated, which could overestimate respiratory and circulatory research figures by up to 30%. The reader should also be aware that the table that follows reflects CIHR's yearly financial contribution to grants and awards and does not reflect only CIHR's new investments. Accordingly, grants and awards held over multiple years and/or renewed in any one year will appear in multiple fiscal years.

The amounts in the table also reflect in-year investments for projects that included, but were not necessarily exclusively related to, circulatory and respiratory health research. It is not possible to determine the proportion of a project amount that is relevant to a specific area of research, therefore the entire project amount can be reported multiple times across several Institutes, as estimated contributions to their areas of research. It would therefore be inappropriate to add up similar numbers from all the Institutes to determine CIHR's overall support of health research. Such a process would lead to a figure which exceeds the total dollars available to CIHR.

# CIHR Grants and Awards for Circulatory and Respiratory Research

				Fisca	ıl Year			
	2000	-01	200	1-02		2-03	2003-04	
	Amount (\$)	Number of Grants/ Awards (n)	Amount (\$)	Number of Grants/ Awards (n)	Amount (\$)	Number of Grants/ Awards (n)	Amount (\$)	Number of Grants/ Awards (n)
CIHR Operating Grants								
Operating Grants	37.825.689	600	49.193.145	742	59.276.335	767	65.749.143	850
Individual Group Project Operating Grants	7,557,737	97	13,658,605	171	14,034,533	161	12,482,905	125
Randomized Controlled Trials	8,204,507	40	11,312,229	44	15,728,199	55	15,576,202	55
Group Grants	6,515,610	21	4,183,971	28	3,958,636	22	4,308,631	22
Equipment and Maintenance Grants	1,700,333	19	1,975,287	26	2,014,414	19	1,469,777	18
NCE Operating Grants	3.525.000	1	3.525.000	1	3.525.000	1	3.525.000	1
Miscellaneous (e.g., Workshops and Symposia)	10,000	2	24,875	5	43,000	3	105,000	8
Institute Support Grant	461,500	1	1.000.000	1	1.000.000	1	1.000.000	1
TOTAL	65,800,376	781	84,873,112	1,018	99,580,117	1,029	104,216,658	1,080
Grants – Strategic Initiatives								
CIHR	2,356,161	64	5,162,513	85	5,230,455	85	4,634,504	74
Any Institute			730,825	12	5,280,176	51	8,374,371	90
Strategic Training Initiative in Health Research			317,969	17	2,475,946	18	4,780,597	19
TOTAL	2,356,161	64	6,211,307	114	12,986,577	154	17,789,472	183
CIHR Training Awards								
Fellowships	3,979,612	163	5,044,335	183	5,258,564	198	4,519,360	161
Studentships	2,050,878	145	2,101,377	151	1,894,283	148	1,860,299	134
Clinician Scientists - Phase I	338,726	8	448,919	11	334,150	8	170,350	4
Exchanges	6,000	2						
TOTAL	6,375,216	318	7,594,631	345	7,486,997	354	6,550,009	299
CIHR Salary Awards								
New Investigators	2,380,239	57	2,754,030	67	3,202,435	81	3,868,397	87
Investigators	2,447,998	46	2,590,767	47	3,139,250	54	3,147,012	51
Chairs	145,833	5	197,500	4	273,223	6	488,215	9
Clinician Scientists - Phase II	256,199	4	219,744	4	346,246	6	448,618	7
Scientists	232,375	4	270,773	4	265,266	5	192,350	3
Career Awards	68,958	2	69,044	2	103,125	3	112,500	3
Senior Research Fellowships	62,500	1	87,516	2	287,531	4	407,995	6
Scholar			59,111	1	48,467	1		
TOTAL	5,594,102	119	6,248,485	131	7,665,543	160	8,665,087	166
Training and Salary Awards – Any Institute								
Studentships			11,601	1	150,045	14	216,887	15
Fellowships					257,542	10	513,816	19
New Investigator					222,650	4	204,259	4
Investigator					60,431	1	142,664	2
TOTAL	0	0	11,601	1	690,668	29	1,077,626	40
GRAND TOTAL	\$80,125,855	1,163	\$104,939,136	1,478	\$128,409,902	\$1,566	\$138,298,852	1,602

## **ICRH Investments in Strategic Initiatives**

(For the Fiscal Year Ended March 31, 2004)<sup>1</sup>

Strategic Initiatives	Number of Grants and	Fiscal Year				
	Awards	2003/2004	2004/2005	2005/2006	2006 & beyond	TOTAL
Strategic Training Initiative	18	\$2,607,802	\$2,607,280	\$2,608,358	\$6,770,547	\$14,593,987
in Health Research						
Gene-Environment Interactions	3	1,232,005	1,473,356	1,073,571	895,181	4,674,113
in Circulatory and Respiratory Health						
(Inter-disciplinary Health Research Teams)						
Fetal-Maternal Influences on	1	183,628	174,073	174,657	346,234	878,592
Circulatory and Respiratory Diseases						
(New Emerging Team Grants)						
Self-regeneration, Repair and	1	171,000	154,000	154,000	308,000	787,000
Replacement of Damaged and						
Diseased Cells, Tissues and Organs in						
Circulatory and Respiratory Diseases						
(New Emerging Team Grants)						
Novel and Integrative Approaches to	1	159,450	149,968	149,977	299,832	759,227
the Assessment, Care and Management						
of Patients with Circulatory and Respiratory						
Diseases (New Emerging Team Grants)						
Chronic Disease and Asthma	3	212,037	267,775	82,200	75,350	637,362
New Emerging Team Grants						
New Frontiers Program	10	329,605				329,605
Strategic Initiative in Health	15	135,817	144,200	37,983		318,000
Research Training: Focus on Stroke						
Excellence, Innovation and Advancement	2	50,000	50,000	50,000	100,000	250,000
in the Study of Obesity and Healthy						
Body Weight (New Emerging Team Grants)						
Global Health Research Pilot Project Grants	1	99,995				99,995
Targeting the Basic Defect in Cystic	1	65,612				65,612
Fibrosis: Request for Applications to						
Develop Novel Therapeutic Approaches						
Advancing the Science to Reduce Tobacco	1	25,000				25,000
Abuse and Nicotine Addiction (Idea Grant)						
Knowledge Translation Strategies	1	7,500	8,333			15,833
for Health Research						
TOTAL	58	\$5,279,451	\$5,028,985	\$4,330,746	\$8,795,144	\$23,434,32

<sup>&</sup>lt;sup>1</sup> Grants and awards in respect to these programs are approved for 1 to 6 years. Figures displayed represent ICRH financial commitments for these programs in 2003/2004 and subsequent years. Availability of these funds in future years is subject to funding appropriations by Parliament. For some initiatives, partners also contributed to the funding of the grants and awards.

<sup>&</sup>quot;Total Value of Grant" can be reported multiple times across several CIHR Institutes given that several Institutes may participate in each grant. Therefore, it would be inappropriate to add up similar numbers from all Institutes to determine CIHR's overall support of health research. Certainly, such a process would lead to a figure that exceeds the total expenditures incurred by CIHR.

# New and Ongoing Investments by ICRH to Strategic Initiatives (For the Fiscal Year Ended March 31, 2004)

D	de Westerland 1 101 C	to Haalib Bassas I	Funding Start	Partners	Total Value	ICRH's Total
Program: Strateg	ic Training Initiative	in Health Research	Date (Fiscal Year)	Partifers	of Grant	Contribution
		Training Program for the	2003/2004	Alberta Heritage	\$1,852,500	\$1,634,090
and Kathryn King	and University of	Development of Cardiovascular		Foundation for Medical	over 5 years	
	Calgary	Nursing Research Capacity in Canada		Research, Cancer Care		
Yvon Cormier	Université Laval	Quebec Respiratory Health	2003/2004	Ontario, CIHR Institute	\$1,852,500	\$1,842,000
Laws Elianal	Liniconnitry of Alberta	Training Program	2002/2004	of Aboriginal People's	over 5 years	£4 400 070
Larry Fliegel	University of Alberta	Membrane Proteins and	2003/2004	Health, CIHR Institute	\$1,719,737	\$1,492,079
Ross T. Macgillivray	University of British	Cardiovascular Disease Training Program in Transfusion	2003/2004	of Cancer Research,	over 5 years \$1,852,500	\$1,644,090
11035 1. Iviacgillivray	Columbia	Science	2003/2004	CIHR Institute of	over 5 years	Ψ1,044,090
Peter D. Paré	University of British	IMPACT: Integrated and Mentored	2003/2004	Gender and Health,	\$1,852,800	\$1,624,090
	Columbia	Pulmonary and Cardiovascular Training	2000/200	CIHR Institute of	over 5 years	<b>41,521,555</b>
Dennis E. Vance	University of Alberta	,	2003/2004	Genetics, CIHR	\$1,852,500	\$1,624,090
	· ·	Obesity, Lipid, Atherosclerosis		Institute of Health	over 5 years	
		Research) Training Program		Services and Policy		
Rui Wang	University of	Gasotransmitter Research	2003/2004	Research, CIHR	\$1,852,500	\$1,624,090
	Saskatchewan	And Training (GREAT)		Institute of Infection	over 5 years	
Paul Armstrong	University of Alberta	Tomorrows Research Cardiovascular	2001/2002	and Immunity, CIHR	\$1,595,722	\$747,539
		Health Professionals (TORCH)		Institute of	over 6 years	
Roy Cameron	University of Waterloo		2001/2002	Mesculoskeletal Health	\$1,839,362	\$152,552
		Training Program		and Arthritis, CIHR	over 6 years	
Stephen Chung	University of British	CIHR Health Research Training	2001/2002	Institute of	\$1,530,625	\$126,677
	Columbia	Program in Transplantation		Neurosciences, Mental	over 5 years	****
Graham Côté	Queen's University	Queen's University Proteomics	2001/2002	Health and Addiction,	\$1,509,335	\$126,677
		and Protein Function Discovery		CIHR Institute of	over 5 years	
James Deemen	l laireacite of	Training Program	2001/2002	Nutrition, Metabolism	<b>64 FOE 700</b>	\$747.539
James Dosman	University of Saskatchewan	Public Health and the Agricultural	2001/2002	and Diabetes, CIHR	\$1,595,722	\$747,539
Aaron Fenster	John P. Robarts	Rural Ecosystem Training Program  Vascular and Cerebrovascular	2001/2002	Institute of Population	over 5 years \$1,415,427	\$860,996
Aaron Fensier	Research Institute		2001/2002	and Public Health,	over 5 years	\$000,990
	Research institute	Transdisciplinary Training Program		CIHR Knowledge	Over 5 years	
		(vc TTP): Integrated Training in Genetics, Biology, Mathematics, Physic and		Translation branch,		
		Engineering Towards an Understanding		Fonds de la recherche		
		and Prevention of Vascular and		en santé du Québec		
		Cerebrovascular Disease		(FRSQ), Heart and		
Kent Hayglass	University of Manitoba		2001/2002	Stroke Foundation of	\$1,841,124	\$457,656
,,,	, i	Regulation to Population Health		Canada, Institut de	over 6 years	
Gary Levy	University of Toronto	A Training Program in Regenerative	2001/2002	recherche Robert-Sauvé	\$1,530,627	\$363,864
		Medicine		en santé et en, sécurité	over 5 years	
Peter Liu	University of Toronto	A Training Program in Cardiovascular	2001/2002	du travail (IRSST),	\$1,749,068	\$976,333
		Research: Molecules to Populations,		Michael Smith	over 6 years	
		Heart Failure to Prevention		Foundation for Health		
Reinhart Reithmeier	University of Toronto	Training Program in Structural	2001/2002	Research, The Arthritis	\$1,845,387	\$152,825
		Biology of Membrane Proteins		Society	over 6 years	
		Linked to Disease	0004/2007		04.04: 127	0.455
Norman Rosemblum		Canadian Child and Youth Health	2001/2002		\$1,841,125	\$152,552
	Children	Research Clinician-Scientist			over 6 years	
		Development Program (CCYHR-CSDP)	Funding Oracle			
		ions in Circulatory and	Funding Start Date	Partners	Total Value	ICRH's Total
Respiratory Hea	lth (Inter-disciplinary	/ Health Research Teams)	(Fiscal Year)		of Grant	Contribution
Pavel Hamet	Université de Montréal	CardioGen: A Consortium to Explore the	2001/2002	Heart and Stroke	\$2.632.272	\$2,632,272
		Nature of Gene-Environment interactions		Foundation	over 5 years	+=,,
		in Major Cardiovascular Disorders Using		of Canada		
		Human and Animal Models: Should Lead to Targeted Therapeutic and				
		Preventive Interventions in Cardiovascu-				
		lar Disorders				
Peter Liu	University of Toronto	Developing an Integrated Canadian	2001/2002		\$2,550,000	\$550,000
		Strategy to Address Heart Failure:			over 5 years	
		Gene Environment Interaction of				
		Host Stress Response Repertoire				
Peter Paré	University of British	Inflammatory Gene Haplotypes	2001/2002		\$2,744,489	\$2,744,489
	Columbia	and their Susceptibility in Cardiac,			over 5 years	
		Vascular and Pulmonary Disease				
No. of the last of						

Program: Fetal-N	/laternal Influences o	n Circulatory & Respiratory Dis-	Funding Start Date	Partners	Total Value	ICRH's Total
	rging Team Grant	I	(Fiscal Year)		of Grant	Contribution
Graeme N. Smith	Queen's University	Pre-eclampsia: Fetal & Maternal Outcomes and Innovative Thera- pies	2003/2004	Heart and Stroke Foundation of Canada	\$1,739,481 over 5 years	\$878,592
Program: Self-regeneration, Repair and Replacement of Damaged and Diseased Cells, Tissues and Organs in Circulatory and Respiratory Diseases - New Emerging Team Grant		Funding Start Date (Fiscal Year)	Partners	Total Value of Grant	ICRH's Total Contribution	
Jolanta Gutkowska	Hôtel-Dieu de Montréal	Development of Cardiac Cell Replacement / Regeneration Therapies Based on Cardiomyogenic Action of Oxytocin	2003/2004	Heart and Stroke Foundation of Canada	\$1,557,000 over 5 years	\$787,000
	t of Patients with Circ	paches to the Assessment, Care ulatory and Respiratory Diseases	Funding Start Date (Fiscal Year)	Partners	Total Value of Grant	ICRH's Total Contribution
Robyn M. Tamblyn	McGill University	E-Integration in the Management of Respiratory and Circulatory Dis- eases: Elucidating the Multi-Level Mechanisms that Optimize Popu- lation Outcomes	2003/2004	Heart and Stroke Foundation of Canada	\$1,499,466 over 5 years	\$759,227
Program: Chroni	ic Diseases and Asth	ma New Emerging Team Grants	Funding Start Date (Fiscal Year)	Partners	Total Value of Grant	ICRH's Total Contribution
Graham Nichol	Ottawa Heart Insti- tute and McMaster University	Cardiovascular Outcomes Related to Economics (CORE) Group	2002/2003	Canadian Diabetes Association, Heart and Stroke Foundation of Canada, The Kidney Foundation of Canada, CIHR Institute of Nutrition, Metabolism and Diabetes	\$1,141,608 over 5 years	\$304,898
Allan Becker	University of Manitoba	Origins of Asthma in Childhood: The Role of Gene-Environment In- teractions	2001/2002	CIHR Institute of Human Develop- ment, Child and Youth Health, CIHR Institute of Infection and Immunity	\$1,233,000 over 5 years	\$411,000
Patrick S. Parfrey	Health Sciences Centre, St. John's, Newfoundland	Canadian Collaborative Group for the Prevention of Illness in Chronic Kidney Disease: The Canadian Prevention of Renal and Cardio- vascular End-Points Trial	2001/2002	Canadian Diabetes Association, Heart and Stroke Foundation of Canada, The Kidney Foundation of Canada, CIHR Institute of Nutrition, Metabolism and Diabetes	\$1,250,000 over 5 years	\$170,934
Program: New Fi	rontiers Program - De	evelopment Grants	Funding Start Date (Fiscal Year)	Partners	Total Value of Grant	ICRH's Total Contribution
Christian F. Deschepper	Institut de recherches cliniques de Montréal	' ·	2003/2004		\$99,240	\$99,240
Kevin Glasgow and Denis Prud'homme		National Cardiac Registry Symposium	2003/2004		\$80,000	\$80,000
Olivier J. Lesur	Université de Sherbrooke	Sepsis Research in Canada: "From Bench to Bedside"	2003/2004		\$35,000	\$35,000
William A. Mutch	University of Manitoba	Fractals, Networks and Power Laws: Their Importance for Medicine and its Allied Sciences	2003/2004		\$40,000	\$40,000
Jeffrey Weitz <sup>2</sup>	Hamilton Civic Hospital	A Multidisciplinary Approach to the Diagnosis, Prevention, and Treatment of Atherothrombosis	2003/2004		\$67,700	\$67,700

 $<sup>^{2}</sup>$  This program was mistakenly listed under the New Frontiers Program – Extension Grants in last year's Annual Report.

Program: New Fr	ontiers Program - Ex	tension Grants	Funding Start Date (Fiscal Year)	Partners	Total Value of Grant	ICRH's Total Contribution
Heather M. Arthur	McMaster University	Mapping of National Assets Related to Cardiovascular Nursing Research Capacity	2003/2004	Heart and Stroke Foundation of Canada	\$15,000	\$7,500
Jean Bourbeau	McGill University	Canadian COPD Cohort Study	2003/2004		\$15,000	\$15,000
Lorraine J. Greaves	BC Centre of Excel- lence for Women's Health	Teen Girls and Smoking: Research Proposal Development	2003/2004	Heart and Stroke Foundation of Canada	\$7,500	\$7,500
Malcolm King	University of Alberta	Aboriginal Community Consulta- tion: Building a Tobacco Misuse Framework	2003/2004	Heart and Stroke Foundation of Canada	\$15,000	\$15,000
Duncan Stewart	University of Toronto	Gene and Cell-Based Therapies for Cardio-Respiratory Disease	2003/2004	Heart and Stroke Foundation of Canada	\$20,000	(in kind)
	jic Initiative in Health Training Initiative	Research Training:	Funding Start Date (Fiscal Year)	Partners	Total Value of Grant	ICRH's Total Contribution
Ksenia Ustinova	Institut de réadaptation de Montréal	The Control of Posture and Bilateral Limb Movements in Stroke Patients	2003/2004	Canadian Stroke Network, Heart and Stroke	\$119,600 over 3 years	\$53,500
Janani Balasubramaniam	University of Manitoba	sponses Following Intracerebral Hemorrhage in Rodent Brain	2002/2003	Foundation of Canada, CIHR Rx&D Research	\$64,250 over 4 years	\$8,525
Yusuf Bhagat	University of Alberta	Diffusion Tensor Magnetic Resonance Imaging of Clinical Stroke	2002/2003	Program, AstraZeneca	\$64,250 over 4 years	\$8,525
Maud Champagne- Levau	Institut universitaire de gériatrie de Montréal	Etats Mentaux et Troubles de la Communication chez les Cérébrolésés Droits	2002/2003	Canada Inc.	\$128,667 over 4 years	\$16,934
Michael Edwards	University of Waterloo	The Effect of Blood Pressure and Carbondioxide on Dynamic Cerebral Autoregulation	2002/2003		\$31,012 over 2 years	\$1,700
Robert Gilbert	Dalhousie University	Stroke, Gene Expression and Neuroprotection: Targets for Treat- ment	2002/2003		\$128,500 over 4 years	\$16,850
James Kennedy	University of Calgary	Patient Preferences for Outcome with Thrombolysis Following Acute Ischemic Stroke	2002/2003		\$157,625 over 4 years	\$20,713
Caroline Lagneux	Montreal General Hospital	The Genetic Dissection of Stroke in the Mouse Model	2002/2003		\$75,278 over 3 years	\$69,189
Yitao Lui	University of British Columbia	AMPAR Trafficking in Models of Cerebral Ischemia	2002/2003		\$64,250 over 4 years	\$8,525
Martin O'Donnell	McMaster University	Improving Anticoagulant Control in Patients with Erratic Control by Daily Vitamin K-Supplementation     Effect of Antithrombotoc Therapy and Cerebrovascular Risk Factors on Cognitive Decline	2002/2003		\$157,625 over 4 years	\$20,713
Hong-Shuo Sun	University of Calgary	Neuroprotective Role of K(ATP)- channels of Interneurons and Neuroglia in Stroke using Knock- out Mice	2002/2003		\$64,250 over 4 year	\$8,525
Patrick Wheland	University of Calgary	Sensory Control of Locomotion in the Developing Mouse	2002/2003		\$150,353 over 4 years	\$23,030
Richard Wilson	University of Calgary	Chemoreceptor Interactions and Neural Plasticity in the Control of Breathing	2002/2003		\$173,153 over 4 years	\$23,030
Timothy Wilson	University of Western Ontario	Sympathetic Nervous System and Cerebrovascular Control	2002/2003		\$37,000 over 2 years	\$3,200
Dong Ya Zhu	University of Calgary	Nitric Oxide-Mediated Down- Regulation of GABAa Receptor Function Following Cerebral Is- chemia	2002/2003		\$128,500 over 4 years	\$16,850

			Funding Start			
	Program: Excellence, Innovation and Advancement in the Study of Obesity and Healthy Body Weight - New Emerging Team Grant			Partners	Total Value of Grant	ICRH's Total Contribution
Louis Pérusse	Université Laval	Gene-Environment interactions in Obesity: Integration of Genetic Information into the Prevention and Treatment of Obesity	2003/2004	CIHR Institute of Nutrition, Metabolism and Diabetes	\$1,395,000 over 5 years	\$1,395,000
Arya M. Sharma	Hamilton General Hospital	Obesity and Atherothrombosis	2003/2004		\$1,500,000 over 5 years	\$1,000,000
Program: Global	Health Research Pilo	ot Project Grant	Funding Start Date (Fiscal Year)	Partners	Total Value of Grant	ICRH's Total Contribution
Jean-Paul Collet and Jean Bourbeau	Beijing Normal University (China)	Disease Burden and Manage- ment Practice of Chronic Obstruc- tive Pulmonary Disease (COPD) in China: A Pilot Study	2003/2004		\$99,995	\$99,995
Program: Targeting the Basic Defect in Cystic Fibrosis: Request for Applications to Develop Novel Therapeutic Approaches		Funding Start Date (Fiscal Year)	Partners	Total Value of Grant	ICRH's Total Contribution	
Miguel Valvano	University of Western Ontario	Pathogenomics and Antimicrobial Target Discovery in Burkholderia Cepacia	2001/2002	Canadian Cystic Fibrosis Foundation	\$149,836	\$149,836
Program: Advance Nicotine Addiction	•	educe Tobacco Abuse and	Funding Start Date (Fiscal Year)	Partners	Total Value of Grant	ICRH's Total Contribution
Mark Eisenberg	Sir Mortimer B. Davis Jewish General Hospital	The PROMISE Trial: A Pilot Study	2003/2004	CIHR Institute of Human Develop- ment, Child and Youth Health	\$50,000	\$25,000
Program: Knowledge Translation Strategies for Health Research		Funding Start Date (Fiscal Year)	Partners	Total Value of Grant	ICRH's Total Contribution	
Malcolm Maclure	University of Victoria	Knowledge Translation for Chronic Disease Management in Primary Health Care Renewal in British Columbia	2002/2003	CIHR Knowledge Translation	\$50,000 over 2 years	\$20,000

# **Institute Support Grant**

(For the Year Ending March 31, 2004)

Available Funds		\$914,415
Expenses		
Institute Development		
Workshops, symposia, conference and meeting support (see Appendix V for a breakdown)	\$131,525	
Professional services	36,668	
Travel expenditures	212,998	381,191
Institute Operations		
Salaries and benefits	477,077	
Office accommodations	39,478	
Telephone and communication services	11,002	
Supplies, material and other services	103,484	
Computer equipment and IT support	3,865	634,906
Total Expenses		\$1,016,098
Unspent Balance <sup>3</sup>		(\$101,683)

# ICRH Support of Conferences, Symposia and Workshops

ppendix V

Workshops, Symposia and Conference Support	
Presenting Sponsor of the Food for Health Exhibition, Canadian Science and Technology Museum	\$20,000.00
Canadian Pre-eclampsia Network Workshop, February 21-23, 2003, Toronto, Ontario	8,000.00
Public Heart Health Forum, Institute of Cardiovascular Sciences, June 7, 2003, Winnipeg, Manitoba	7,000.00
Silver Supporter, 19th Inter American Congress of Cardiology 2003, October 24-27, 2003, Toronto, Ontario	33,476.00
Benefactor, Canadian Cardiovascular Congress 2003, October 24-29, 2003, Toronto, Ontario	10,000.00
Sir Richard Peto, 2 <sup>nd</sup> Annual ICRH Distinguished Lecturer, Canadian Cardiovascular Congress 2003, October 27, 2003, Calgary, Alberta	5,000.00
International Society for Autonomic Neuroscience (ISAN), July 4-9, 2003, Calgary, Alberta	5,000.00
Molecular and Cellular Basis for Human Disease Symposium, June 6-7, 2003, London, Ontario	1,000.00
Great Lakes G-Protein Coupled Receptor Retreat 2003, October 17, 2003, Honey Harbour, Ontario	3,000.00
The HUPO/IUBMB 2 <sup>nd</sup> Annual World Congress 2003, October 8-11, 2003, Montreal, Quebec	2,000.00
First International Congress on Stress Responses in Biology and Medicine, "The Stress Response: Mechanisms to Applications", September 10-14, 2004, Quebec City, Quebec	2,500.00
2 <sup>nd</sup> Annual Alan Bernstein Lecture Series, Dr. Jeffrey Drazen, December 4-5, 2003, Vancouver, British Columbia	1,500.00
Bone Disease and Cystic Fibrosis Workshop, September 12-13, 2003, Toronto, Ontario	2,567.00
2 <sup>nd</sup> Jack Pepys Occupational Asthma Workshop, May 21-22, 2003, Toronto, Ontario	5,000.00
10th Conference on International Health, Canadian Society for International Health, October 26-29, 2003, Ottawa, Ontario	5,000.00
"How to Build a Human: Predictor" (a BBC/TLC co-production), Gee! In Genome Exhibit, October 2, 2003 - January 4, 2004, Vancouver, British Columbia	8,000.00
ICRH-Hosted Meetings	
Partners Forum III, April 27-28, 2003, Ottawa, Ontario	\$12,482.00
National Research Forum for Young Investigators in Circulatory and Respiratory Health, Dr. Naranjan Dhalla (Chair), Institute of	100,000.00
Cardiovascular Sciences, University of Manitoba, May 6-9, 2004, Winnipeg, Manitoba <sup>4</sup>	