



ANNUAL REPORT

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INSTITUTE OF NEUROSCIENCES, MENTAL HEALTH AND ADDICTION
ONE OF THE CANADIAN INSTITUTES OF HEALTH RESEARCH



CIHR IRSC



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

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MESSAGE FROM THE PRESIDENT OF CIHR

In 2005-06, the Canadian Institutes of Health Research (CIHR) undertook an evaluation of the Institutes' activities since their creation in 2000. Looking back on this period, CIHR's Institute of Neurosciences, Mental Health and Addiction (CIHR-INMHA) has proven to be a leader among Institutes in bridging the needs of distinct research communities, incorporating them into important initiatives and fostering partnerships to support these initiatives.

With CIHR's mandate as the focal point, CIHR-INMHA initiatives are firmly grounded in two important principles – excellence and partnership. Excellence is found in its large scientific community, and demonstrated through Institute activities. As Scientific Director of CIHR-INMHA, Rémi Quirion has been a leading-edge innovator in building successful partnerships. In many cases, he and his team have led the groundwork for CIHR-wide or multi-Institute initiatives, particularly at the international level.

CIHR-INMHA has set an example within our organization in engaging stakeholders and working with government, non-governmental organizations, voluntary health organizations and the private sector. For example, in 2005-06 Dr. Quirion and members of the Institute's Advisory Board worked closely with the Senate Committee on Social Affairs, Science and Technology in its study of mental health and addiction. As a result of their work and influence, the Senate Committee's report, which contained 118 recommendations, emphasized the importance of research as a necessary foundation for building a better health system for dealing with mental illness and addiction.

As you will see in the following pages, CIHR-INMHA is truly making a difference within its research communities, which will, in turn, translate into improved health for Canadians.

I would like to extend my appreciation to Dr. Quirion, CIHR-INMHA's staff and members of the Institute Advisory Board whose work has resulted in the many accomplishments detailed in this report.



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

MESSAGE FROM THE SCIENTIFIC DIRECTOR

For CIHR's Institute of Neurosciences, Mental Health and Addiction (CIHR-INMHA), 2005-06 has been a mix of hindsight and foresight. The stakeholder survey and international evaluation of CIHR has prompted us to undertake a retrospective inventory of our efforts to date. At the same time, we were challenged to look to the future by the Standing Senate Committee on Social Affairs, Science and Technology to develop a ten-year research agenda on mental health and addiction. Both endeavors required input from our various stakeholders and I would like to take this opportunity to thank each and everyone who has contributed to these important processes. I would also like to thank Senators Michael Kirby and Wilbert Keon and the Standing Senate Committee for engaging CIHR-INMHA and the mental health community in their important undertaking.

CIHR-INMHA spans many different areas and we attempt to collaborate with our various stakeholder groups on all of our planning processes and many other activities. We are fortunate to be able to draw from a very large pool of excellent scientists, talented research trainees and dedicated expert representatives from our various partner organizations. On behalf of all of us at CIHR-INMHA, I extend our appreciation to all who collaborate with us and provide active and passionate input.

There are many individuals within the organization who help meet the day-to-day challenges of the Institute. CIHR-INMHA's staff, pictured on the previous page, is small but big in dedication and effort. The extended CIHR-INMHA team includes key staff in the various CIHR corporate departments. I would like to acknowledge all. I would also like to express my appreciation to my fellow Scientific Director and CIHR senior management colleagues, President Alan Bernstein and Governing Council.

To effectively represent CIHR-INMHA as its Scientific Director, I draw much wisdom and advice from the members of our Institute Advisory Board (IAB) and our dedicated Chair, Dr. Anthony Phillips. Every year the membership of the IAB is renewed through a formal process coordinated by CIHR. Four individuals completed their term in 2005-06, all of them inaugural members whose contributions have been tremendous: Drs. Michael Salter, Roberta Palmour, Lisa McKerracher and Mr. Phil Upshall. We extended a warm welcome to Mrs. Judy Hills and Drs. Freda Miller, Yves de Koninck and Serge Brochu. I would like to thank all past and current IAB members for their many contributions and ongoing friendship.

In addition to the four IAB members who completed their term this past year we also had to say good-bye to Dr. Marlene Reimer who passed away on November 1, 2005. Marlene had been a member of the Board from the very beginning and chair of our Focus Group on Training & Education. She was a superb advocate for nursing research in Canada and had recently moved from the University of Calgary to become Dean of the Faculty of Nursing at the University of Manitoba. Despite her illness, she also dedicated herself to the work of our Institute and to developing our training initiatives, most notably the Brain Star Program. We were all deeply saddened by Marlene's passing and will miss a great colleague and friend. It is to her that I dedicate this Annual Report as I know she was as proud of CIHR-INMHA's accomplishments as I am.



Dr. Rémi Quirion, Ph.D., FRSC, CQ
Scientific Director

Institute of Neurosciences, Mental Health and Addiction

Institute Advisory Board Members



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University of British Columbia



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Judy Illes
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Mary Jardine
Schizophrenia Society
of Canada



Ravi Menon
University of Western
Ontario/Robarts
Research Institute



Donald Weaver
Dalhousie University

Outgoing Members:

Lisa McKerracher, Roberta M. Palmour, Michael W. Salter, Philip C. Upshall



OUTSTANDING RESEARCH

Excellence is the foundation for all research supported by CIHR. For CIHR-INMHA's large research community, the competition for strategic funding is particularly high. Thus, the projects and teams supported by CIHR-INMHA are of the highest quality and those most promising to translate into better health and services. The drive for excellence encourages collaboration among researchers of various disciplines and within and across the three domains of the Institute – neuroscience, mental health and addiction. Collaboration is also a key ingredient for the development and delivery of CIHR-INMHA's research programs. All strategic initiatives are developed with stakeholder input and participation and programs are coordinated and funded in partnership with other internal and external organizations. Combined, excellence and collaboration translate into leveraging of ideas, expertise and resources and are essential for CIHR-INMHA to achieve its mission.

Regenerative Medicine and Nanomedicine

The Regenerative Medicine and Nanomedicine Initiative is one of the four main CIHR large initiatives. This very successful funding program took shape from CIHR-INMHA's first Strategic Plan and has developed into one of our highest leveraged investments. Co-led with the Institute of Genetics (CIHR-IG), the initiative includes six other CIHR institutes – Aboriginal Peoples' Health (IAPH), Aging (CIHR-IA), Cancer Research (CIHR-ICR), Circulatory and Respiratory Health (CIHR-ICRH), Infection and Immunity (CIHR-III), and Musculoskeletal Health and Arthritis (CIHR-IMHA) – and a large and growing number of partners:

- Canadian Space Agency
- National Research Council Canada

- Natural Sciences and Engineering Research Council of Canada
- Canadian Stroke Network
- Stem Cell Network
- ALS Society of Canada
- Foundation Fighting Blindness
- Heart and Stroke Foundation
- Jacob's Ladder
- Juvenile Diabetes Research Foundation International
- NeuroScience Canada
- Ontario Neurotrauma Foundation

Regenerative medicine and nanomedicine are considered the new frontiers of health research. Together, these two areas of research have the potential to dramatically transform how to prevent, diagnose and treat disease. Regenerative medicine encompasses a wide range of health research fields that share the goal of stimulating the renewal of bodily tissues and organs or the restoration of function. Nanomedicine is the broad application of nanotechnology to health research, and includes specialized biomedical measurements or interventions at a molecular scale that are used to diagnose and treat diseases or restore function to damaged tissues or organs. The potential for impact from research advances in these two fields goes beyond the health care system: rapid and effective transfer of technology may result in commercialization and spur economic growth.

As of June 2005, CIHR and its partners have launched three Requests for Applications and committed more than \$39 million to the Initiative. The successful grants were announced in February 2006, including the following particularly relevant to CIHR-INMHA's mission:

New Discoveries: High Risk Seed Grants

- Development of a MEMS/nano-scale pressure sensor for glaucoma (Ordan Lehmann and team, University of Alberta)
- Role of neural stem/progenitor cell migration in neural regeneration following stroke (Qi Wan, University of Toronto)

Team Grants

- Engineering repair of the central nervous system (David Coleman and team, McGill University)
- Sensory cueing, neuroplasticity and motor rehabilitation (Bin Hu and team, University of Calgary)
- Multidisciplinary approach to promote and evaluate locomotion after spinal cord lesions and stroke (Serge Rossignol and team, Université de Montréal)
- The development of a molecular imaging program for central nervous system neoplasms (Boguslaw Tomanek and team, University of Calgary)

Research in Addictions: Innovative Approaches in Health Research

This 2005 funding initiative bridges three separate areas of addiction research through an integrative program and innovative menu of funding tools. Led by CIHR-INMHA, the initiative is jointly supported with three other CIHR institutes – Aboriginal Peoples' Health (CIHR-IAPH), Human Development, Child and Youth Health (CIHR-IHDCYH), Gender and Health (CIHR-IGH) – and four external partners:

- Canadian Centre on Substance Abuse
- Canadian Tobacco Control Research Initiative (CTCRI)
- Health Canada
- Ontario Problem Gambling Research Centre

The Request for Applications grew out of the 2003 Forum on Alcohol and Illicit Drugs Research in Canada. Two separate consultations and partnerships led to the inclusion of a theme on co-occurring or cross-addictions: the 2002 Canadian Tobacco Control Research Summit and the 2003 Inter-provincial Forum on Problem Gambling Research. The integrative approach has opened the door to better understanding the inter-relationship among the various target behaviours in areas such as causality, co-occurrence, preventive strategies, and therapeutic responses. The successful projects were announced in March 2006, totaling a collective commitment of \$4.3 million:

New Discoveries: High Risk Seed Grants

- A parallel study of methamphetamine psychosis on brain structure and neuronal integrity in humans and animals, with regards to cognitive impairment (Alasdair Barr and team, University of British Columbia)
- Towards biopsychosocial correlates of severe forms of driving under the influence (Thomas Brown and team, McGill University)
- Compulsion and control: Prefrontal and mesolimbic systems in human addiction (Alain Dagher, McGill University)

New Emerging Team Grants

- Investigating comorbid substance use and psychiatric disorders: An integrated approach (Usoa Busto and team, University of Toronto)
- Vancouver multi-disciplinary collaboration of injection drug use researchers (Thomas Kerr and team, University of British Columbia)
- Cross-substance patterns of use, consequences and policy responses (research in addictions: Innovative approaches in health research – new emerging team grant (Tim Stockwell and team, University of Victoria)

Research Policy Grant

- Cannabis control in Canada: Developing a policy evaluation framework (Benedikt Fisher and team, University of Toronto)

Second Analysis Grant

- The increase in alcohol consumption, fears and facts (Andrée Demers and team, Université de Montréal)
- Profil de consommation de drogues selon le genre chez les jeunes de la rue (Elise Roy and team, McGill University)
- Gender differences in alcohol-related aggression among youth: Secondary analyses of the Canadian Addiction Survey (CAS) and the Canadian Campus Survey (CCS) (Samantha Wells and team, University of Toronto).

Suicide Prevention Targeted to Aboriginal Peoples

This initiative is the result of a workshop hosted by CIHR-INMHA and Health Canada in 2003 and addresses a critically important issue. Suicide is one of the leading causes of death for young Canadians and is a particular problem among First Nations. This is why CIHR-INMHA joined forces with the Institute of Aboriginal Peoples' Health (CIHR-IAPH) to launch two Requests for Applications. The first competition in 2004 led to the funding of two New Emerging Team (NET) grants, in partnership with Health Canada and the First Nations and Inuit Health Branch. The second RFA, sponsored by CIHR-INMHA and CIHR-IAPH, resulted in the funding of two additional NET projects (announced in January 2006), bringing the collective funding commitment in this area to \$5.2 million:

- Building community support for aboriginal youth: Prevention of youth suicide attempt and personal injury (Henry Harder and team, University of Northern British Columbia)

- Établissement d'un modèle écosystémique, intergénérationnel et multidisciplinaire pour comprendre le suicide en milieu autochtone: Fondements pour une prévention efficace (Michel Tousignant and team, Université du Québec à Montréal)

Neuroethics

CIHR-INMHA has been on the forefront of this relatively new field which addresses the important ethical and social questions raised by rapid progress in brain research. Following a workshop hosted in 2002, the Institute launched Requests for Applications for New Emerging Teams in 2003, 2004 and 2005. The most recent competition resulted in the funding of one NET grant, in partnership with the CIHR Ethics Office, bringing funding commitments to date in neuroethics to almost \$2.9 million:

- States of Mind: Emerging Issues in Neuroethics (Françoise Baylis, Dalhousie University)

In December 2005, CIHR-INMHA announced a new Request for Applications for a Chair in Neuroethics intended to help build capacity in this growing field. In addition to our efforts on the national front, CIHR-INMHA is also leading the development of an international network on neuroethics, as well as working with other national partner organizations on the development of a joint funding initiative.

Mental Health in the Workplace

This initiative started in 2003 when CIHR-INMHA and the Institutes of Population and Public Health (CIHR-IPPH) and Gender and Health (CIHR-IGH) mandated a working group to develop a long-term research agenda on mental health in the workplace. In 2004, the working group convened a workshop to develop research priorities and subsequently developed

a joint Request for Applications launched in June 2005, in partnership with the following organizations:

- Canadian Labour Congress
- Fonds de recherche en santé du Québec (FRSQ) and its networks on:
 - Population Health Research
 - Occupational Health and Safety
- Global Business and Economic Roundtable on Addiction and Mental Health
- Institut de recherche Robert-Sauvé en santé et sécurité au travail
- Ontario Workers Safety and Insurance Board (WSIB)

The goal of the Mental Health in the Workplace initiative is to support action-oriented multidisciplinary research in collaboration with workplace stakeholders leading to improved mental health in the workplace. The results of the Team Grant competition will be announced in 2006-07 and another Request for Applications is planned for 2007-08.

Early Life Events and First Episodes of Brain Disorders

The study of Early Life Events and First Episodes of Brain Disorders is one of the four large strategic initiatives described in the CIHR-INMHA Strategic Plan. A priority setting workshop held in early 2004 formed the basis for a Request for Applications announced in December 2004 in partnership with the Institute of Human Development, Child and Youth Health (CIHR-IHDCYH). The goal of the initiative is to further understanding of the aetiology of brain disorders and to develop more appropriate diagnosis, individualized therapies, improved quality of care, better health services and population health strategies. The Request for Applications included two funding tools: New Discoveries – High Risk Seed Grants and New Emerging Team Grants. The results will be announced in 2006-07.

CIHR Operating Grant Competition – CIHR-INMHA Priority Announcements

CIHR-INMHA continues to be firmly committed to the CIHR investigator-initiated operating grant program and supports highly rated proposals related to its mandate in both annual competitions. Thirty-six grants have been awarded by CIHR-INMHA since 2002 and the majority of grantees have subsequently been successful in obtaining CIHR or external grants. The following grants were funded from the March 2005 and September 2005 competitions:

- In-vivo magnetic resonance spectroscopic quantification of brain metabolites (Peter Allen and team, University of Alberta)
- Further exploration of the mechanisms underlying motor dysfunction in antipsychotic drug-treated monkeys (Pierre Blanchet and team, Université de Montréal)
- Modulation of nav1.7 and nav1.8 two peripheral nerve Na⁺ channels by local anesthetics and auxiliary beta-subunits (Mohamed Chahine, Université Laval)
- In vivo exploration of brain connectivity in temporal lobe epilepsy (Donald Gross, University of Alberta)
- Role of synapsin II in schizophrenia and its regulation by typical and atypical antipsychotic drugs (Ram Mishra, McMaster University)
- GABA-A receptor plasticity in response to experimental epilepsy (Michael Poulter, Carleton University)
- Role of angiotensin in blood-brain barrier regulation and CNS immunity (Alexandre Prat, Université de Montréal)
- Cellular electrophysiology of neuropathic pain (Peter Smith, University of Alberta)
- Cerebral metabolism in traumatic brain injury (Garnette Sutherland and team, University of Calgary)
- Novel insight into septohippocampal function in health and disease (Sylvain Williams, McGill University)

Vascular Health and Dementia Initiative

The following grants were supported in the second competition under this partnership with the Heart and Stroke Foundation of Canada, the Alzheimer Society of Canada, Pfizer Canada Inc., the CIHR Rx&D Collaborative Research Program and the Institute of Aging (CIHR-IA):

- Impact of vascular dementia, vascular MCI and vascular health on cognition (Sylvie Belleville, Université de Montréal)
- In vivo characterization of subcortical vascular cognitive impairment using advanced high field MR techniques (Sandra Black, University of Toronto)
- The cholinergic system and vascular risk factors in Alzheimer's disease and vascular dementia (Sultan Darvesh, Dalhousie University)
- Is increased SSAO-mediated oxidative deamination a risk factor for vascular dementia and Alzheimer's disease? A biosocial investigation (Peter Yu, University of Saskatchewan)

Neurobiology of Psychiatric Disorders and Addictions Program

The following grants were supported in the second competition under this partnership program with the Canadian Psychiatric Research Foundation, AstraZeneca Canada Inc. and the CIHR-Rx&D Collaborative Research Program:

- Role of Tyrosine hydroxylase 2 (TPH2) in affective disorders (Nicholas Barden, Laval University)
- Effects of smoking history and acute nicotine on mood, arousal, and cognitive responses to Tryptophan depletion in depression-prone subjects (Verner Knott, University of Ottawa)

- Effects of varying the interval between a reinstating stimulus and the opportunity to seek drugs: An animal model of relapse with potential treatment implications (Suzanne Erb, University of Toronto)

Mona Bronfman Sheckman Award

The following award was made in 2005-06 under this partnership program with the Canadian Psychiatric Research Foundation, the Edward Bronfman Family Foundation and the Centre for Addiction and Mental Health Foundation:

- Gene expression and novel promoter polymorphisms in serotonin and noradrenaline systems: Association with suicidal behaviour in schizophrenia and bipolar disorder (Vincenzo de Luca and team, University of Toronto)

Neurobiology of Pain Young Investigator Grant Program

The following grants were supported in the first competition under this partnership program with the Canadian Pain Society, AstraZeneca Canada Inc., the Institute of Musculoskeletal Health and Arthritis (CIHR-IMHA) and the CIHR Rx&D Collaborative Research Program:

- Mechanisms underlying spinal microglial maturation and the ontogeny of neuropathic pain following peripheral nerve injury (Simon Beggs University of Toronto)
- Functional magnetic resonance imaging of cerebro-spinal mechanisms involved in pain and pain modulation in humans (Pierre Rainville, Université de Montréal)

Japan-Canada Joint Health Research Program

The following grants were supported by CIHR-INMHA in the third competition under the CIHR partnership program with the Japan Society for the Promotion of Science:

- Spatiotemporal dynamics of molecular signaling in synaptic function and plasticity (Alan Fine, Dalhousie University; Japanese collaborator: Atsushi Miyawaki, RIKEN Brain Science Institute)
- Development of animal models of drug dependence and medication tools (Lalit Srivastava, McGill University; Japanese collaborator: Toshitaka Nabeshima, Nagoya University)
- Role of the rho GTPase signaling pathway in dopamine neuron (Louis-Eric Trudeau, Université de Montréal; Japanese collaborator: Kazuto Kobayashi, Fukushima Medical University)

Canada-Finland-China Collaborative Program in Neuroscience

The following grants were supported by CIHR-INMHA in the tri-lateral partnership program led by the Academy of Finland:

- Inflammatory mechanisms in neuronal injury (Paul Kubes, University of Calgary; Finnish collaborator: Heikki Rauvala and team, University of Helsinki)
- Integration of Growth Factor Signals Regulating Cellular Differentiation in Embryonic Midbrain-hindbrain Region (Timothy Hughes, University of Toronto; Finnish collaborator: Juha Partanen, University of Helsinki)
- Development of Molecular Mechanisms Underlying Neuron-astrocyte Control of Cerebral Blood Flow (Brian MacVicar, University of British Columbia; Finnish collaborator: Kai Kaila, University of Helsinki)



OUTSTANDING RESEARCHERS IN INNOVATIVE ENVIRONMENTS

To put excellence into action, we need outstanding researchers and environments. To build excellence into the future, we need innovative training opportunities. CIHR-INMHA aims to recognize and foster excellence throughout its programs and to encourage new ideas and new approaches to research and to training. CIHR-INMHA's scientific community is made up of highly qualified and internationally recognized individuals. We aim to include both, established scientists and emerging researchers, in all of our planning activities to ensure that the programs offered by the Institute meet their needs.

The Brain Star Program

A new Brain Star is born every two weeks, joining the CIHR-INMHA circle of excellent young researchers who have been recognized by this award. The Brain Star Program was one of our first initiatives and by the end of 2005-06 we have counted 133 awardees. The award goes to emerging scientists still enrolled in their studies who have published their research findings as first author in prominent scientific journals. Publications span the entire spectrum of the Institute's mandate and the research findings are summarized every year in a booklet showcasing the award recipients. CIHR-INMHA is proud of its growing collection of Brain Star knowledge and considers the award recipients as important stakeholders. They are our future!

Brain Star of the Year

This special recognition goes to the highest ranked Brain Star from the previous 12 month period and is presented at the CIHR-INMHA Annual Meeting. The award recipient is selected by the Training & Education Focus Group of the Institute Advisory Board. In memory of her commitment to training and her dedicated service as chair of the Focus Group, the award will in future be known as the “Marlene Reimer Brain Star of the Year Award”.

The winner of the 2005 Brain Star of the Year Award was Sean Mulligan, a doctoral student at the University of Calgary and the University of British Columbia. His outstanding article, entitled “Calcium transients in astrocyte endfeet cause cerebrovascular constrictions”, was published in *Nature* in 2004 (431: 195-199).



Sean Mulligan, Brain Star of the Year, receiving his award from Michael Salter, Chair of CIHR-INMHA IAB Focus Group on Training & Education.

- The paper describes a previously unknown mechanism for the regulation of cerebral blood flow (CBF). CBF is critical for the maintenance of healthy brain function. Using a cutting-edge two photon calcium uncaging technique, Sean discovered that a rise of calcium within the astrocytes instructs the blood vessels to constrict, which will alter blood flow. The novel observations presented in the paper provide not only insight into normal physiological brain function, but also a link between increased calcium in astrocytes and haemodynamic pathology. During a stroke for example, the ischaemic insult that is known to increase astrocyte calcium might induce vascular constrictions to decrease CBF further and exacerbate infarct damage. Astrocyte calcium signaling might therefore be a novel therapeutic target for treatment of conditions such as stroke and migraine. Neurotransmitters that are known to modulate behavioural state cause large increases in calcium within astrocytes. It is quite plausible that the hypofrontal blood flow state experienced in schizophrenia results from an astrocyte-mediated constriction pathway. The discovery has been hailed as a gateway to new treatments and is of fundamental importance in understanding how the brain regulates blood flow.

Strategic Training Initiative in Health Research (STIHR)

The STIHR Program was developed by CIHR to support the creation of new interdisciplinary training opportunities and to ensure the continuous supply of highly qualified people to create and translate new knowledge. More than 30 percent of CIHR-INMHA’s strategic budget is committed to training and to developing capacity in all areas of neurosciences, mental health and addiction. STIHR grants are provided for six years at up to \$300,000 per year.

CIHR-INMHA supports or partially supports a total of 18 teams, in partnership with all other CIHR institutes and two external funding partners:

- National Alliance for Autism Research (NAAR), US
- Fonds de la recherche en santé du Québec (FRSQ)

STIHR Grants Workshop

This workshop held in Montreal in November 2005 was organized by CIHR-INMHA and co-sponsored by NAAR and FRSQ to promote interactions between CIHR-INMHA's STIHR programs. Attended by representatives from all 18 teams as well as the funding partners, the event showcased the richness and diversity of the research being done by the trainees associated with the various STIHR programs. It provided principal investigators and trainees the opportunity for scientific exchange and networking, sharing their experiences and identifying "best practices". A full report on the meeting is available on the CIHR website at www.cihr-irsc.gc.ca/e/31042.html.

Barbara Turnbull Award for Spinal Cord Research

This award, now in its fourth year, recognizes an outstanding researcher who has contributed to the advancement of world-leading spinal cord research conducted in Canada. The winner of the 2005 Barbara Turnbull Award was Dr. Joseph Culotti, Senior Investigator at the Samuel Lunenfeld Research Institute, Mount Sinai Hospital, University of Toronto. His project examines the growth and migration of nerve cells in development and repair of the nervous system. The knowledge created from Dr. Culotti's research may ultimately be critical to any future processes to repair spinal cords.



Joseph Culotti, recipient of 2005 Barbara Turnbull Award, with Barbara Turnbull and her loyal companion Bella.

CIHR-INMHA-sponsored Workshops, Conferences and Symposia in 2005-06

CIHR-INMHA proactively organizes meetings and workshops involving collaboration with other institutes or organizations, nationally and internationally. These gatherings bring together scientific leaders or experts in a specific field, young promising scientists and key representatives of our stakeholder groups and partners. In 2005-06, due to budgetary restrictions, CIHR-INMHA supported only a limited number of external events related to the Institute's mandate and vision, with the goal to foster collaboration, educate or enable knowledge exchange and communication of research results. The following is a partial list of CIHR-INMHA-sponsored and organized meetings with additional events listed in other sections of this report:

- Creative Expression, Communication and Dementia, May 2005

- 5th International Myotonic Dystrophy Consortium, May 2005
- Striving for Best Practices and Equitable Mental Health Care Access for Racialized Communities, April-May 2005
- Synaptic Function and Plasticity, July 2005
- 2005 Mental Health Awareness Week: Face Mental Illness, October 2005

Conference on the Biology of Manual Therapies

Bethesda, Maryland, June 2005

This first major joint CIHR-National Institutes of Health (NIH) conference was led by the NIH National Centre for Complementary and Alternative Medicine (NCCAM) and organized in partnership with four NIH institutes, the Institute of Musculoskeletal Health and Arthritis (CIHR-IMHA) and CIHR International Branch. People are increasingly turning to manual therapies such as chiropractic manipulation and massage therapy and it is important for researchers and health care providers to better understand how these therapies affect the body. The conference reviewed the science explaining how manual therapies might work and identified questions for further research. The recommendations from the conference (www.nccam.nih.gov/news/upcomingmeetings/final_recommendations.htm) will lead to a joint Program Announcement in 2006-07.

Canadian Research Consultation on Co-Morbidity

Ottawa, September 2005

Co-morbidity involving mental illness, addiction, brain disorders and the senses has been viewed as a priority since the earliest stages of our strategic planning. The consultation meeting in 2005 included researchers, clinicians and representatives of non-governmental organizations and industry. The meeting produced a report and set out a research agenda for 2005-10 that will form the basis for a Request for Applications to be launched in 2006-07. The report is available on the CIHR website at www.cihr-irsc.gc.ca/e/documents/inmha_co-morbidities_e.pdf.

Translational Neuroscience Think-Tank: Facilitating the Development of Therapeutics for Mental Illness

Vancouver, October 2005

This meeting was co-sponsored by CIHR-INMHA and the CIHR/Rx&D Collaborative Research Program and organization was led by George Robertson at Dalhousie University. The meeting brought together leaders in the field of translational neuroscience research and industry to identify ways in which CIHR-INMHA/CIHR might facilitate the development of diagnostic and therapeutics for the treatment of brain diseases. Participants identified strengths in Canadian clinical neuroscience research that would best capitalize on opportunities for therapeutic development in three areas: 1) technologies and resources to improve therapeutic development; 2) pre-clinical research; and 3) clinical research.

Society for Neuroscience (SfN) Canadian Neuroscience Showcase: The Journey Inside

Washington, DC, November 2005

The Canadian Neuroscience Showcase was one of a series of Embassy receptions held during the Society for Neuroscience Annual Meeting in Washington. Organized by CIHR-INMHA in partnership with the Canadian Embassy and the Canadian Association for Neuroscience, the event highlighted Canada's neuroscience research excellence and international partnerships. Sponsoring partners were the National Research Council of Canada and the Canadian Space Agency. The highlight of the event was two superb presentations by Dr. Michael Meaney of McGill University and Dr. Dave Williams, a physician turned astronaut who talked about Neurolab, the scientific experiments conducted aboard the Columbia Space Shuttle.

Inhalant Abuse Among Children and Adolescents

Rockville, Maryland, November 2005

This consultation on building an international research agenda was led by the US National Institute on Drug Abuse and the Fogarty International Center. The meeting provided important updates on inhalant abuse research and highlighted the need to increase public awareness about the issue among researchers, health care providers and the general public. CIHR-INMHA sponsored Canadian experts and participated along with two other CIHR Institutes (CIHR-IAPH and CIHR-IHDCYH) and the Mexican Consejo Nacional Contra Las Adicciones.

Japan-Canada Joint Workshop on Brain Science

Tokyo, Japan, January 2006

This event was organized in conjunction with the 2006 meeting of the Joint Selection Committee for the Japan-Canada Joint Health Research Program, in collaboration with the Canadian Embassy in Tokyo. The workshop featured seven Japanese-Canadian speaking teams, including Dr. Michael Salter of the University of Toronto and his collaborator, Dr. Kazuhide Inoue of Kyushu University, the first recipients of support from our joint funding program with Japan. The event also included a poster session and reception attended by the Canadian and Japanese ambassadors and high-level government officials.

Indigenous Suicide Prevention Research and Programs in Canada and the United States: Setting a Collaborative Agenda

Albuquerque, New Mexico, February 2006

This joint Canada-US meeting was planned and sponsored by Indian Health Services, NIH, the Substance Abuse and Mental Health Services in the US, the First Nations and Inuit Health Branch of Health Canada, CIHR-IAPH and CIHR-INMHA. The conference brought together representatives from research, service organizations, youth, community programs and governments from Canada, the US and US territories. They shared the most current information on indigenous suicide, found ways to continue to communicate and collaborate, and formed work groups to bring research and prevention efforts forward in a multi-year effort. A report is available at www.kauffmaninc.com/IndigenousSuicidePreventionFinalReport.pdf.



TRANSLATING HEALTH RESEARCH INTO ACTION

This area is where research excellence becomes excellence in action. It is perhaps the most important area for collaboration and partnership. CIHR-INMHA must work with its stakeholders to translate scientific achievements into relevant actions and to contribute to a knowledge-based health care system and knowledge economy. The next CIHR-INMHA Strategic Plan will place greater emphasis on knowledge translation and future funding initiatives will be designed to encourage more action-oriented research. The following is a list of meetings and initiatives focused on knowledge translation, stakeholder engagement and the communication of research results.

Fourth CIHR-INMHA Annual Meeting, Vancouver, November 2005

Knowledge exchange and translation were the focus of our 2005 Annual Meeting in Vancouver. This very important CIHR-INMHA event brings together scientists, research trainees, representatives of the Institute's partner organizations and consumers, bridging science and the community. The meeting followed the successful format of previous years with a focus on three major scientific topics – bipolar disorder, Parkinson's Disease and addictions. Each session included presentations by researchers and research trainees highlighting scientific advances, as well as perspectives from patients and the

voluntary health sector to demonstrate the challenges faced by patients and their families and caregivers. A recurring theme in all of the topics we heard to date was discrimination and stigma, emphasizing the importance of this INMHA research priority. The panel format allows for questions from the audience and dialogue among the presenters.

In addition to the three panel discussions, the meeting offered a Brain Star session featuring excellent presentations by four recent award winners. An entire afternoon of the two-day meeting was devoted to a Partners' Forum providing opportunity for the varied audience to interact. A key focus of the forum was a session on knowledge translation, with two presentations by knowledge exchange specialists. Both speakers emphasized the importance of the voluntary sector's role in this area. The Partners' Forum also provided information on CIHR-INMHA priorities and current activities and highlighted the significant contributions made by the voluntary sector and professional associations.

To recognize the importance of our partners and their special contributions to the Institute, we have established the CIHR-INMHA Partnership Award, celebrated at the Annual Meeting each year. The difficult task of selecting one from a long list of meritorious organizations is made by a committee made up of Institute Advisory Board members and external members. The 2005 award was presented to Phil Upshall and the Mood Disorders Society of Canada in recognition of their strong advocacy for mental health research. Mr. Upshall himself has contributed greatly to CIHR-INMHA during his tenure on the Institute Advisory Board as a representative of the voluntary sector and a strong advocate for mental health.

The Annual Meeting also allows us to acknowledge excellence in research through the presentation of the Brain Star of the Year Award. The 2005 award recipient, Sean Mulligan, is featured in the section on "Outstanding Research". Partnership and research excellence will continue to feature prominently in our Annual Meetings as the key ingredients in CIHR-INMHA's success.

Finally, the Annual Meeting provides opportunity pay tribute to the outgoing members of the Institute Advisory Board and to acknowledge special contributions made by staff. At the 2005 meeting, a special thank-you was offered to Dr. Mary Ann Linseman who had retired from CIHR earlier that year after many years of dedicated service. Dr. Linseman will be remembered for her excellent leadership in peer review and grant administration and as the internal neuroscience expert at CIHR and its predecessor, the Medical Research Council of Canada.



Phil Upshall, accepting the 2005 INMHA Partnership Award on behalf of the Mood Disorders Society of Canada.

Mental Health in the Workplace Annual Meeting

The first annual meeting for the Mental Health in the Workplace initiative took place in Montreal in June 2005 and preceded the launch of the Request for Applications described in the “Outstanding Research” section. The event was organized by Dr. Michel Vézina from l’Institut national de santé publique du Québec with consultation from the Mental Health in the Workplace task force. The meeting was opened by Federal Health Minister Ujjal Dosanj and CIHR President Alan Bernstein and drew intense interest from the media, researchers, workplace organizations and the public. Attended by more than 300 people, the event promises to become a major annual venue to engage the many stakeholders in the action-oriented initiative and to communicate future research results in this area.

CIHR Outreach Initiative

This unique initiative was developed by CIHR-INMHA to enlist non-government organizations in partnerships to help bridge the communications gap between science and the general public. The program offers awards of up to \$10,000 for innovative promotional ideas that take a message to the public or targeted organizations. Four awards were made in the first competition in 2003, co-sponsored with the Institute of Gender and Health (CIHR-IGH) and CIHR Communications Branch. Due to the popularity of this program, additional competitions were held in 2005 and 2006. The winners announced in 2005-06, co-funded with CIHR Communications Branch are:

- Brain Awareness Week and Neuroscience Outreach Program (Centre for Neuroscience Studies at Queen’s University)
- Senior’s Mental Health Research Network (Canadian Coalition for Senior’s Mental Health)
- Toonie for Autism Day Campaign: A Look at Research on Autism in Canada (Autism Society of Ontario)

The Brain from Top to Bottom

CIHR-INMHA is proud to support this unique and highly successful initiative. The Brain from Top to Bottom is a website encyclopedia that popularizes scientific information about the brain and human behaviors, aimed at various audiences and simple and fun to use. Internet search engines have ranked the site among the most popular ones in both French (le cerveau) and English (the brain). The site is updated on a regular basis with the newest information: www.cihr-irsc.gc.ca/e/24433.html or www.thebrain.mcgill.ca.

Brain Awareness Week

The Dana Foundation and Dana Alliance for Brain Initiatives are dedicated to education and advancing public awareness about the critical importance of brain research. Brain Awareness Week is an innovative program conceptualized by the Dana Alliance and is coordinated around the globe in March every year. It consists of a series of unique and diverse events organized by individuals, groups or organizations. Brain Awareness events are casting a wide net to communicate the progress and promise of neuroscience

research to a worldwide audience. Several Canadian events are supported by CIHR-INMHA every year. In March 2006 they were held in Montreal, Toronto and Winnipeg.

Unique Challenges in Mental Health and Addictions

The interim report of the Standing Senate Committee on Social Affairs, Science and Technology on mental illness, mental health and addiction (published in December 2004) called for increased funding for research in mental health in Canada. CIHR-INMHA worked closely with Senators Kirby and Keon and their Committee and was challenged to come up with a ten-year research agenda for mental health and addiction for inclusion in the Commission's final report. While the timeline was extremely short, CIHR-INMHA felt it is essential to have input from all stakeholders for this important task and issued an open call for submissions in July 2005. Despite the time constraints and no funding offered, the call resulted in more than 40 briefs from across Canada. Submissions came from academics, non-governmental organizations, voluntary health organizations, provincial governments and industry and resulted in an impressive collection of imaginative recommendations. The four top-ranked proposals were:

- Canadian Collaborative Mental Health Initiative (CCMHI, Executive Director Scott Dudgeon, Mississauga, Ontario)
- Canadian Mental Health Services Knowledge Translation Network (Paula Goering, University of Toronto; Elliot Goldner, Simon Fraser University; and Alain Lesage, Université de Montréal)
- A National Strategy for Research in Mental Health and Addictions: Focus on Children and Youth (Terry Russell, Victoria, B.C.)
- Psychiatric Epigenomics: A National Strategy for Research in Mental Health in Canada (Arturas Petronis, University of Toronto)

The stakeholder consultation not only informed Senators Kirby and Keon and their Committee but will also feed into the development of the second CIHR-INMHA Strategic Plan. The input will also be important for the action plan to be developed by the new Public Health Agency of Canada. CIHR-INMHA and its partners must ensure that the unique challenges facing research in mental health and addictions are included in all aspects of the health agenda in Canada.



EFFECTIVE PARTNERSHIPS AND PUBLIC ENGAGEMENT

Collaboration and partnership are embedded in CIHR-INMHA as key principles to meet the Institute's mandate. CIHR-INMHA's stakeholders and partners provide advice on how best to advance science and what science to advance. Stakeholders participate in the strategic planning process and the development of priorities and strategic initiatives. Partnerships are necessary to pool resources and expertise, important in all areas but particularly to fund excellent research and to help ensure the continued supply of highly qualified people. CIHR-INMHA encourages new ideas and new approaches to develop unique programs and

collaborations. The Institute's motto for partnership is "flexibility" which is essential to work with a large variety of partner organizations. Flexible diplomacy is particularly important in the development of international partnerships and to seize new opportunities for Canadian scientists and voluntary health organizations for collaborations with researchers and organizations in other countries. CIHR-INMHA's commitment to collaboration is expressed in the growth and caliber of its portfolio of national funding initiatives and international partnerships as outlined below and throughout this report:

NATIONAL PARTNERSHIPS

Barbara Turnbull Award for Spinal Cord Research

This annual award recognizes excellence in spinal cord research and goes to the top-ranked applicant identified through CIHR's open grant competition. It consists of a top-up to the grant in the amount of \$50,000. The award program, implemented in 2002, is a partnership with the Barbara Turnbull Foundation for Spinal Cord Research and NeuroScience Canada. Information on the 2005 award recipient is provided in the previous section.

Vascular Health and Dementia Research Grant Program

This joint grant program is led by the Heart and Stroke Foundation of Canada, in collaboration with the Alzheimer Society of Canada, the Institute of Aging (CIHR-IA), INMHA, Pfizer Canada Inc. and the CIHR Rx&D Collaborative Research Program. The program offers four grants of up to \$120,000 each for three years. The results of the second competition held in 2005 are shown in the "Outstanding Research" section.

Neurobiology of Psychiatric Disorders and Addictions Program

This collaborative funding program won the 2004 CIHR Partnership Award, following the first joint competition in 2003. The program is coordinated by the Canadian

Psychiatric Research Foundation (CPRF) and includes AstraZeneca and the CIHR/Rx&D Collaborative Research Program. It offers research grants of up to \$100,000 per year for two-year terms. The results of the 2004 competition are shown in the section on "Outstanding Research".

Mona Bronfman Sheckman Award

This award goes to a postdoctoral fellow undertaking research in the area of mood disorders at the Centre for Addiction and Mental Health (University of Toronto). The program is managed by the Canadian Psychiatric Research Foundation and partners include the Edward Bronfman Family Foundation and the Centre for Addiction and Mental Health Foundation. The 2005 winner of the award is shown in the "Outstanding Research" section.

Neurobiology of Pain Young Investigator Grant Program

This joint grant program is led by the CIHR Rx&D Collaborative Research Program and includes, in addition, the Canadian Pain Society, AstraZeneca Canada Inc. and the Institute of Musculoskeletal Health and Arthritis (CIHR-IMHA). The program offers one two-year grant each year of up to \$82,500. The results of the 2005 competition are shown in the "Outstanding Research" section.

INTERNATIONAL PARTNERSHIPS



Scientific Directors Rémi Quirion (CIHR-INMHA), Anne Martin-Matthews (CIHR-IA) and Michael Kramer (CIHR-IHDCYH) at a reception hosted by the Japan Society for the Promotion of Science.

Japan-Canada Joint Health Research Program

This grant program with the Japan Society for the Promotion of Science (JSPS) was announced in 2003 and supports collaborations between Canadian and Japanese investigators. The program is jointly coordinated by JSPS and CIHR and currently includes the participation of two other CIHR Institutes: Aging (CIHR-IA) and Human Development, Child and Youth Health (CIHR-IHDCYH). CIHR-INMHA is credited for initiating the program and is leading coordination with JSPS. Four grants were approved by a Joint Selection Committee in January 2006 including three supported by CIHR-INMHA as listed in the section on “Outstanding Research”.

China-Canada Joint Health Research Initiative

CIHR-INMHA also initiated and coordinates this new CIHR joint program with the National Natural Science Foundation of China. The initiative was announced in December 2005 with participation from six CIHR institutes. Modeled after the initiative with Japan, the program will support collaborations between Chinese and Canadian investigators. The first Joint Selection Committee meeting will take place in Canada in September 2006.

Collaborations with the Academy of Finland

■ Research Program in Neuroscience (NEURO)

A different model of partnership, this very successful program is led by the Academy of Finland (AF) and includes a separate partnership between AF and the National Natural Science Foundation of China. Grants under this four-year research program were announced in late 2005 and the Canadian-Finnish collaborative projects are listed in the section on “Outstanding Research”. The program will include three major networking meetings over the course of the four-year period, with the “kick-off” meeting scheduled for April 2006.

■ Research Program on Substance Abuse and Addiction

This new program was announced in early 2006 and is a new funding initiative of the Academy of Finland involving international collaborations. Other AF funding partners

include the Russian Fund for Basic Research and the Russian Foundation for Humanities. The results of the competition will be announced in late 2006.



Rémi Quirion and Academy of Finland President Raimo Väyrynen, signing a Memorandum of Understanding at the Canadian Embassy in Helsinki.

Collaborations with the US National Institutes of Health (NIH)

CIHR-INMHA has established a track record of partnerships with the various NIH Institutes and Centers associated with the CIHR-INMHA mandate. Collaborations take many forms and include the joint meetings outlined in the previous section. Joint funding initiatives in 2005-06 include the following:

■ **Social Neuroscience**

This joint Request for Applications, led by the National Institute on Drug Abuse (NIDA) and with the National Institute on Alcohol Abuse and Alcoholism (NIAAA) and the National Institute on Aging (NIA), focuses on cognitive/behavioural processes and neurological mechanisms of social behaviour relevant to alcohol and drug abuse and decision making and judgment over the life course.

■ **Epigenetics of Neurobiology and Addiction**

The goal of this joint Request for Applications with NIDA is to link epigenetic changes to other biological changes from the level of gene expression to behaviour, or allow investigators to gather preliminary data on epigenetic mechanism related to addiction.

■ **Shared Neurobiology of Fragile X Syndrome and Autism**

This joint Program Announcement is a public-private partnership led by the National Institute of Mental Health (NIMH) and includes two other NIH institutes, the Health Research Board of Ireland, Cure Autism Now, the National Alliance for Autism Research, Autism Speaks, the FRAXA Research Foundation and CIHR's Institute of Genetics (CIHR-IG).

■ **Brain Disorders in the Developing World: Research Across the Lifespan**

Led by the Fogarty International Centre, this joint Program Announcement includes nine other NIH partners and the National Alliance for Autism Research.

International Partnership for Mental Health Research (IPMHR)

The IPMHR was conceptualized by CIHR-INMHA and several partner organizations that share a common cause and commitment to working together. The partners formed a new alliance of mental health organizations dedicated to the challenge of promoting and supporting mental health research around the world. Founding members of the IPMHR include two US-based organizations – the National Alliance for Research on Schizophrenia and Depression (NARSAD) and the National Education Alliance for Borderline Personality

Disorder (NEA-BPD) – the Schizophrenia Society of Canada and the Canadian Psychiatric Research Foundation. The IPMHR was officially launched at the Inaugural Research Symposium “Making the Connection” in Toronto in September 2005. The symposium concentrated on *making the connection* between the funding organizations, researchers and stakeholders. The event was sponsored by CIHR-INMHA and the National Institute of Mental Health (NIMH) and moderated by Rémi Quirion and Thomas Insel, NIMH Director.

International Network on Neuroethics

CIHR-INMHA is leading the development of an International Network on Neuroethics. As part of this effort, the Institute hosted an international meeting during the November 2005 Society for Neuroscience Annual Meeting in Washington. The objective of this event was to develop linkages and to begin working toward a global research agenda for neuroethics. The participant list included leading experts in neuroethics and representatives from three NIH Institutes, the DANA Foundation, the UK Medical Research Council, the Swedish Research Council and the German Federal Ministry of Education and Research. Other countries represented at the meeting were Japan, Switzerland and Italy. The meeting provided an overview of the evolving field of neuroethics and initiatives of the participating organizations and explored a number of joint activities. CIHR-INMHA also co-organized a small research symposium in neuroethics with the Centre for Bioethics at Karolinska Institutet and Uppsala University in Uppsala, Sweden in May 2005, with representatives from the Swedish Research Council and the Academy of Finland. As well, CIHR-INMHA is working with other research funding organizations to establish an international funding initiative.

CIHR-INMHA-IBRO Schools in Neuroscience

CIHR-INMHA became a formal member of the International Brain Research Organization (IBRO) in 2003 and is a proud sponsor of the IBRO Neuroscience School Program, a series of advanced courses designed to encourage former graduates and others to take up careers in neuroscience. CIHR-INMHA co-funds two neuroscience schools every year, in Africa and South America. In 2005, Schools were held in Rabat, Morocco (Hormones and Brain) and in Buenos Aires, Argentina (Receptors, Channels, and Synapses). CIHR-INMHA also assists with the recruitment of Canadian researchers who participate as part of the faculty.

Other International Activities

In addition to the aforementioned partnerships, CIHR-INMHA collaborates with various international organizations and continuously seizes new opportunities for interaction. The Institute also fosters interactions between national and international partners. For example, CIHR-INMHA, the Canadian Association for Neuroscience and NeuroScience Canada are working with the Society for Neuroscience (SfN) initiatives aimed at benefiting Canadian neuroscientists and the general public. CIHR-INMHA representatives serve on committees or are members of international organizations such as the Society for Neuroscience (SfN) or the Dana Alliance for Brain Initiatives. CIHR-INMHA also exhibits at the SfN Annual Meetings, as well as at other international conferences.



ORGANIZATIONAL EXCELLENCE

CIHR-INMHA's excellence is founded on the strength of its scientific community. Another success factor is partnership and the excellent contributions made through collaboration with the various stakeholders.

Excellence and partnership are also finding expression in the leadership provided by CIHR-INMHA's Scientific Director Rémi Quirion. His expertise, personal commitment, vision and inclusive management style inspires all those who work alongside him. Colleagues and staff are partners in the management of CIHR-INMHA and stakeholders are partners in the realization of CIHR-INMHA's mandate. Dr. Quirion continuously challenges barriers and advocates flexibility and creativity.

Excellent leadership is also provided by the members of the CIHR-INMHA Institute Advisory Board (IAB) who convene three to four times every year. They collaborate on priority-setting exercises, represent CIHR-INMHA on national and international committees and events and lend their expertise to all areas of the Institute. Each member participates in at least one of the CIHR-INMHA Focus Groups, including NGOs & Partnership, Government Affairs & Networking, International Relations, Industry, Training & Education, Ethics & Law, Performance & Evaluation and a newly established Focus Group on Knowledge Translation. The Focus Groups report on their activities at every meeting of the IAB. Summaries of all IAB meetings are provided on the CIHR-INMHA website.

Four IAB members reached the end of their term in 2005: Drs. Michael Salter, Roberta Palmour, Lisa McKerracher and Mr. Phil Upshall. Four new members were appointed through the annual CIHR IAB renewal process: Mrs. Judy Hills, Executive Director of the Canadian Psychiatric Research Foundation bringing extensive experience in the voluntary sector; Dr. Freda Miller at the University of Toronto, an expert in stem cell research; Dr. Yves de Koninck at Université Laval, an expert on spinal cord research and pain; and Dr. Serge Brochu at the University of Montreal, an expert on crime and drug abuse.

CIHR is a virtual organization and the CIHR-INMHA staff team is an excellent example of virtual collaboration. During 2005-06, four members were working at the Institute's office in Montreal (Rémi Quirion, Richard Brière, Ramia Jabr and Rocio Benalcazar), two at the CIHR corporate headquarters in Ottawa (Barbara Beckett and Asimina Xidou), Eric Marcotte in Toronto and Astrid Eberhart in Stockholm, Sweden. Flexibility and creativity are key principles for the small team and the distance is bridged through team spirit, collaboration and dedication to CIHR-INMHA.

Support is also provided by a number of individuals in the various departments at CIHR. Key partners are the Communications Branch and the Knowledge Creation Portfolio which is responsible for CIHR-INMHA-led funding programs, including competition management, peer review and grant administration. In turn, CIHR-INMHA staff members collaborate on CIHR corporate activities and participate in committees and special working groups.

This annual report outlines the collective achievements of all the members of the extended CIHR-INMHA team and our numerous partners.



INSTITUTE PROFILE

Mandate

CIHR's Institute of Neurosciences, Mental Health and Addiction supports research to enhance mental health, neurological health, vision, hearing, and cognitive functioning and to reduce the burden of related disorders through prevention strategies, screening, diagnosis, treatment, support systems, and palliation. Associated research will advance our understanding of human thought, emotion, behaviour, sensation (sight, hearing, touch, taste, smell,) perception, learning and memory.

Mission

To foster excellence in research aimed at increasing knowledge of brain and spinal cord disorders, mental illnesses, and addictions. To translate this new knowledge into improved prevention, health outcomes, and quality of life for all Canadians.

Vision

Innovative research will provide new knowledge of the biological and socio-cultural processes underlying neurological, mental and addictive disorders. Such a comprehensive approach to research will improve prevention, diagnosis and treatments, and will enhance the quality of life of Canadians suffering from illnesses covered under the broad mandate of the Institute.

Strategic goals

PROMOTE and **SUPPORT** excellence in peer-reviewed, internationally recognized and ethically responsible research in the domains of the Institute, including co-occurrence with other health problems.

ENCOURAGE trans-disciplinary research in order to facilitate knowledge transfer aimed at developing and improving health care treatments and services.

ENSURE the training and support of the next generation of Canadian scientists in all aspects of neurosciences, mental health and addiction by promoting and sustaining the development of trans-disciplinary programs of research and training.

WORK with non-governmental and volunteer health organizations, municipal governments and other interested stakeholders to reduce the discrimination and prejudices associated with neurological and sensory disorders, mental illnesses and addictions.

PROMOTE the mandate of INMHA and its contribution through effective communication with all sectors of civil society.

WORK with the Government of Canada, municipal, provincial and territorial governments, members of the scientific community, non-governmental and volunteer health organizations, foundations and all Canadians to ensure that sufficient human and financial resources, consistent with the burden of disease of the disorders covered by the INMHA, are made available to the Institute in order to enable it to achieve its goals.

INTERACT with all stakeholders to identify research priorities, establish partnerships and undertake collaborative activities.

Values

In pursuing its strategic goals, INMHA has adopted the following guiding principles as values. INMHA:

- is committed to the support of excellence, scientific integrity and ethics in research that meet the highest international standards;
- cultivates an understanding of the diversity of the multiple disciplines covered by the INMHA mandate in order to expand beyond traditional approaches to research;
- affirms the importance of research and knowledge translation as a means of making a difference in the lives of people who are experiencing or who are at risk from the disorders and illnesses of concern to INMHA;
- takes advantage of the latest advances in research methodology and information technology;
- recognizes that the development of indicators of research outcome is important in determining the impact of research upon the health of Canadians;
- promotes frank and rigorous scientific and public debate on issues and ideas emanating from all of INMHA's domains;
- fosters collaborations with its stakeholders to create a common commitment to the goals of INMHA;
- adopts ethical, transparent and effective governance and management processes that establish INMHA's credibility and strengthen its organizational capacity;
- acknowledges its accountability to the Governing Council of the CIHR, the Government of Canada, and Canadians for the funding received and the accomplishment of its goals.

INSTITUTE OF NEUROSCIENCES, MENTAL HEALTH AND ADDICTION INVESTMENTS IN STRATEGIC INITIATIVES

For the year ended March 31, 2006

Contributions through Grants and Awards

STRATEGIC INITIATIVES	Number	2005-06	2006-07	2007-08	2008 and beyond	Total
Unallocated		\$				\$ –
Healthy Pregnancy	1	100 000	100 000	100 000	–	300 000
Invention – Tools, Techniques and Devices	3	238 730	123 925	–	–	362 655
New Discoveries	1	29 813	–	–	–	29 813
Ice Teams	1	114 400	114 400	–	–	228 800
Understanding the Placebo Effect	1	240 000	240 000	–	–	480 000
Regenerative Medicine-Neuroscience	1	6 305	366 178	–	–	372 483
Post-Traumatic Stress Disorder	2	442 246	442 246	–	–	884 492
Operating Grants	15	975 608	310 534	–	–	1 286 142
Knowledge Translation Applications	1	10 000	–	–	–	10 000
New Emerging Team Grant Program (NET Program)	8	1 137 750	1 072 244	–	–	2 209 994
Training Awards	10	180 813	110 000	–	–	290 813
National Network for Aboriginal Mental Health Research & Training	1	87 586	58 317	–	–	145 903
Gene Therapy-Neuroscience Diseases	1	100 000	–	–	–	100 000
CIHR Training Program Grants	15	1 930 558	2 608 795	1 817 090	–	6 356 443
Rx&D	4	100 000	25 000	–	–	125 000
Palliative End of Life Care	1	100 000	100 000	100 000	30 000	330 000
Stigma Global Health	1	100 000	41 667	–	–	141 667
NeuroEthics	1	294 010	574 739	567 859	623 302	2 059 910
Healthy Development Trajectories of Infants, Children & Youth	1	102 360	101 120	101 120	–	304 600
Tobacco	2	549 539	499 769	499 769	–	1 549 077
Regenerative Medicine & Nanomedicine	3	300 000	370 000	570 000	355 000	1 595 000
JSPS-CIHR Joint Health Research Program	4	114 200	204 050	–	–	318 250
EJLB Foundation Chairs	1	50 000	50 000	–	–	100 000
Suicide Prevention Targeting Aboriginal People	3	328 397	576 997	574 938	786 813	2 267 145
Vascular Dementia	4	8 790	8 897	–	–	17 687
Eric Single Studentship	1	7 001	7 001	–	–	14 002
NSERC-SSHRC Initiative		–	63 775	53 219	–	116 994
Partnership Health Systems Improvement (PHSI)	2	21 141	45 337	3 510	–	69 988
Neuroethics	2	10 000	–	–	–	10 000
Research in Addictions	10	61 200	355 012	195 144	313 629	924 985
Early Life Events & Brain Disorders	10	50 000	–	–	–	50 000
Canada-Finland NeuroSciences	3	90 000	90 000	–	–	180 000
	114	\$ 7 880 447	\$ 8 660 003	\$ 4 582 649	\$ 2 108 744	\$ 23 231 843

* Note : Grants and awards in respect to these programs are approved for 1 to 6 years. Figures displayed represent CIHR financial commitments for these programs in 2005-06 and subsequent years. Availability of these funds in future years are subject to funding appropriations by Parliament. For some initiatives, partners also contributed to the funding of grants and awards.

INSTITUTE SUPPORT GRANT

For the year ending March 31, 2006

Available Funds		A	\$ 573 663
EXPENSES			
Institute Development			
Conferences fees	\$ 381 019		
Institute Advisory Board	49 056		
Travel Expenditures	–		
Other expenditures	79 835		
		Subtotal	\$ 509 910
Institute Operations			
Salaries and benefits	\$ 440 350		
Office rentals	–		
Telephone and communication services	9 434		
Supplies, material and other services	19 252		
Office furniture and fixtures	–		
Computer equipment and IT support	1 874		
Professional services	31 830		
Travel expenditures	98 404		
Other expenditures	–		
		Subtotal	\$ 601 145
Total Expenses		B	\$ 1 111 055
UNSPENT BALANCE*		A – B	\$ (537 391)

* Note : The balance as at March 31, 2006 is carried forward to the subsequent fiscal year.