



ANNUAL REPORT

2003-2004



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

Canada



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Dear Colleagues,

It is with great pride that I introduce our third Annual Report for Fiscal Year 2003-2004. The year constituted another extraordinary period in the evolution of INMHA, the largest of the 13 CIHR Institutes in terms of the number of scientists we represent and potential partner organizations. The mandate of our Institute is equally large, but despite the never-ending list of challenges we have expanded our portfolio of funding programs and partnerships. We continued to refine our priorities and have already begun the second phase of strategic planning. At the same time, we are working with CIHR Ottawa staff to evaluate the work of the Institute and the impact of our strategic programs. This will involve all of you as stakeholders to ensure an accurate measure of INMHA's success. I thank everyone in advance for giving their time to this important endeavor.



Rémi Quirion
Scientific Director

INMHA's Institute Advisory Board, composed of scientists and representatives of the voluntary sector, has seen its first turn-over of members. We said good-bye to Drs. Bruce McEwen, Robert Ladouceur and Jack Jhamandas. Their contributions are greatly appreciated and I know they will continue to be outspoken advocates for our Institute. We were pleased to welcome Drs. Jane Stewart, Katherine Bennett, Douglas Zochodne and Patrice Roy who immediately became part of the INMHA team. The service of our insightful and committed board has been integral to the success of INMHA and I cannot thank all members enough for their generous contributions of time and energy. A special thank you again goes to our Chair, Dr. Anthony Phillips, for his outstanding leadership.

So many other people have contributed to INMHA's accomplishments. In addition to the small and dedicated Institute team, there are all the CIHR staff members in Ottawa whose contributions are often invisible to the outside world. I thank you for your continued assistance. I would also like to express my deep appreciation to my Scientific Director colleagues, CIHR President Alan Bernstein and Governing Council members for making this position such an inspirational and fun experience. Last but not least, I would like to thank my scientific colleagues across Canada. You are the credibility behind INMHA and the high reputation on which we build our programs and partnerships.

I look forward to another exciting year.



Anthony G. Phillips, Chair
University of British Columbia



Gordon DuVal
University of Toronto



Jack H. Jhamandas
University of Alberta



Stanley P. Kutcher
Dalhousie University



Robert Ladouceur
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Marlene A. Reimer
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Patrice Roy
Pfizer Canada



Michael W. Salter
The Hospital
for Sick Children



Peter G. Scholefield
Ontario Neurotrauma
Foundation



Eric W. Single
University of Toronto



Martin J. Steinbach
University of Toronto



Phillip C. Upshall
Canadian Alliance
for Mental Illness
and Mental Health



Kathryn Jane Bennett
McMaster University



Jane Stewart
Concordia University



Douglas W. Zochodne
University of Calgary

Outgoing Members:

Jack H. Jhamandas, Robert Ladouceur, Bruce McEwen

New Members:

Patrice Roy, Kathryn J. Bennett, Jane Stewart, Douglas W. Zochodne

OUTSTANDING RESEARCH

In the three years since its inception, INMHA has implemented a significant number of funding programs corresponding to the mission and strategic priorities outlined in its Strategic Plan. The programs are positioned to accelerate the discovery of new scientific information on brain research, mental health and mental illness, and the causes and consequences of addiction. The far-reaching mandate of the Institute enables innovative partnerships and cross-cutting initiatives with other CIHR Institutes and external funding organizations, as is evident in the following description of programs. The most obvious force behind the Institute, however, is the internationally recognized excellence in neuroscience research in Canada. Thanks to the accomplishments of INMHA-supported scientists, the continued growth of the Institute's reputation and, in turn, its portfolio of funding programs is ensured.

In June 2003, we announced two new INMHA-led Strategic Initiatives that are CIHR multi-institutes initiatives as well as key priorities of our first Strategic Plan: 1) Regenerative Medicine and Nanomedicine, and 2) Advancing the Science to Reduce Nicotine Addiction and Tobacco Abuse. Both initiatives were championed by INMHA and now involve CIHR and numerous external partners, some of our best examples of successful partnership and pooling of resources. Some of our other new programs support important research in emerging areas or where unique opportunities arise.

Regenerative Medicine and Nanomedicine

In partnership with:

- Institute of Genetics (co-lead)
- Institute of Aging
- Institute of Aboriginal Peoples' Health
- Institute of Cancer Research
- Institute of Circulatory and Respiratory Health
- Institute of Infection and Immunity
- Institute of Musculoskeletal Health and Arthritis
- Canadian Stroke Network
- Heart and Stroke Foundation
- Juvenile Diabetes Research Foundation International
National Research Council Canada
- Natural Sciences and Engineering Research Council of Canada
- NeuroScience Canada
- Stem Cell Network
- Ontario Neurotrauma Foundation

Regenerative medicine is an emerging field of research directed toward repair or replacement of injured tissues and organs through natural or bioengineered means. Nanomedicine is the application of nanotechnology - materials, tools, techniques, and devices based on the nanometer length scale - to health research. The integration of research in these fields has tremendous implications for health care and disease, and represents an exciting new area for Canada. The multi-disciplinary focus of this integrated research also includes the social, cultural and ethical perspectives of human health. This strategic initiative marked the first step in creating a national framework for regenerative medicine and nanomedicine in Canada, with an initial focus on the areas of Nanotechnology Development and Nanomedicine, Stem Cells, and Tissue Engineering.

Coordinated and led by INMHA, the initiative includes a New Emerging Team program, an Interdisciplinary Capacity Enhancement Program and Pilot Projects. The initial funding available was a minimum of \$12.3 million. Through our continued efforts in the development of partnerships, including with industry and the private sector, it is expected that the funding base for the initiative will be expanded.

Advancing the Science to Reduce Nicotine Addiction and Tobacco Abuse

In partnership with:

- Canadian Institutes of Health Research
- Institute of Cancer Research (co-lead)
- Institute of Aboriginal Peoples' Health
- Institute of Circulatory and Respiratory Health
- Institute of Gender and Health
- Institute of Human Development Child and Youth Health
- Canadian Cancer Society
- National Cancer Institute of Canada
- Heart and Stroke Foundation
- Health Canada
- Canadian Lung Association in partnership with l'Association pulmonaire du Québec.

Co-ordination of this INMHA-championed strategic initiative is provided by the Canadian Tobacco Control Research Initiative (CTCRI), a national partnership comprised of the Canadian Cancer Society, the National Cancer Institute of Canada, Health Canada and CIHR. The strategy and partnership grew out of our 2002 Canadian Tobacco Control Research Summit at which leading scientists, practitioners and decision-makers in Canada identified an innovative,

multi-faceted agenda for high quality research, spanning multiple disciplines and research themes. In addition to highlighting priority populations and research topic areas, the agenda calls for attention to fostering new research methods, increasing research capacity and excellence, facilitating knowledge translation, managing research data, and building national and international collaborations.

The program announcement included a focus on nicotine addiction, tobacco abuse and tobacco intervention research, and topics and issues described in the report of the 2002 Summit. The breadth of programs that were offered signals the intent of INMHA and our partners to build capacity and strengthen Canadian research in this area. The initiative will support multidisciplinary research from across all of CIHR's research themes. To help facilitate the building of capacity, the announcement included a wide range of funding tools including: Interdisciplinary Capacity Enhancement (ICE) teams, Policy Research Grants, and Knowledge Synthesis grants. In addition, Research Planning Grants, Idea Grants and others were offered to help build capacity by supporting researchers to develop excellent research projects. The initiative drew a significant number of applications in each category and is expected to fund at least \$5 million in research over 5 years.

Suicide Prevention Targeting Aboriginal People

This program was launched in 2003, in partnership with the Institute of Aboriginal Peoples' Health, Health Canada (First Nations and Inuit Health Branch). The Request for Applications invited proposals for New Emerging Teams focused on suicide-related research or central to the reduction of suicide in Canada related to the aboriginal community.

Research in Bioethics with a Focus on Neuroethics

Research in the domains covered by INMHA presents important ethical challenges. INMHA is committed to making bioethics research a priority focus both to advance knowledge and to train the next generation of bioethics scholars.

A workshop on Ethics organized by Institute Advisory Board member Gordon DuVal and Rémi Quirion in November 2002 in Toronto provided the basis for a Request for Applications launched in June 2003.

CIHR Investigator Initiated Grant Competition – INMHA Priority Announcements

INMHA's commitment to support excellent research related to our mandate also extends into the CIHR grants competition where projects are funded through Priority Announcements. The following grants were funded from the March 2003 and September 2003 competitions:

- Cellular immune injury of human oligodendrocytes (Jack Antel, McGill University)
- Regulation of orexin (hypocretin) neurons by monoaminergic and cholinergic systems (Gilbert Kirouac, Memorial University)
- Support for woman who experienced symptoms of post-partum depression (Nicole Letourneau, University of Alberta)
- Cellular mechanisms of hippocampal sharp wave and associated fast oscillations (Liang Zhang, University Health Network/University of Toronto)

New Emerging Team Program

A key program used by INMHA to support strategic research priorities is the NET Program with the purpose of building capacity in new and developing areas of research, such as **Understanding the Placebo Effect, Regenerative Medicine-Neuroscience and Post-Traumatic Stress Syndrome**. The following grants were funded within these themes, bringing the number of INMHA supported or co-funded NET programs to 11 (each supported for a 5-year term):

- Comprendre l'effet placebo à partir d'études expérimentales et cliniques sur le sommet et la douleur impliquant des états de vigilance altérés (Gilles Lavigne, Université de Montréal)
- Spinal cord injury : discovery and development of rescue and repair strategies (Lynn Weaver, John P. Roberts Research Institute), in partnership with the Ontario Neurotrauma Foundation
- Understanding risk factors, co-morbidity and global health issues in PTSD: laying the foundation for early identification in at-risk populations and improving preventive treatment strategies for all Canadians (Gordon Asmundson, University of Regina)
- Stress, trauma and recovery: early stage studies (Nicholas Coupland, University of Alberta)

Canadian Community Health Survey on Mental Health and Well-being

The following grants are supported in partnership with the Institute of Gender and Health, the Institute of Health Services and Policy Research, the CIHR Rural and Northern Health Research Initiative, Statistics Canada, and the Ontario Problem Gambling Research Centre:

- Le soutien social, la santé mentale et le bien-être des populations pauvres au Canada (Jean Caron, Douglas Hospital Research Centre/McGill University)
- Health services use by Canadian seniors with major depression (Martin Cole, McGill University)
- Two population-based mental health studies using the Canadian community health survey (Cycle 1.2): social phobia and problem gambling (Brian Cox, University of Manitoba)
- A mental health divide? Rural-urban and intra-rural differences in mental health and use of mental health services (Carl d'Arcy, University of Saskatchewan)
- Psychiatric disorders, chronic physical conditions, workplace stress and disability in the Canadian working population (Carolyn Dewa, Centre for Addiction and Mental Health/University of Toronto)
- Troubles anxieux chez les jeunes de 15 à 24 ans: évolution, déterminants et recours aux services (Louise Fournier, Université de Montréal)
- Utilization of services for mental health reasons – cross provincial differences in rates and determinants (Alain Lesage, Hôpital Louis H. Lafontaine/ Université de Montréal)

- Prevalence and correlates of pathological gambling (Stephen Newman, University of Alberta)
- Descriptive epidemiology of major depression in the Canadian population (Scott Patten, University of Calgary)
- Gender issues in depression and anxiety for Canadians less than 65 years of age (Sarah Romans, Sunnybrook and Women's College Health Sciences Centre/University of Toronto)
- Concurrent substance use and mental disorders in Canada: prevalence and impact on service utilization (Brian Rush, Centre for Addiction and Mental Health/University of Toronto)
- Correlates of mental health services utilization and emotional wellbeing: Analysis of the Canadian community health survey cycle 1.2 (Jitender Sareen, University of Manitoba)
- The relation between work-related factors and mental health in Canadian men and women (David Streiner, Baycrest Hospital/University of Toronto)
- General practice and mental health care: a Canadian-Australian comparative study (Raymond Tempier, Montreal General Hospital/McGill University)
- Validation of administrative cases of major depressive disorder using cchs 1.2 data (Paul Waraich, University of British Columbia)
- Bias in self-reported health services utilization in the Canadian community health survey on mental health and well being: influences of age, gender, personal characteristics and patterns of care (Bruno Zumbo, University of British Columbia)

Physician Health in Canada

INMHA co-funded the following two proposals with the Canadian Medical Association:

- Development of a guide for common indicators for Canadian Physician Health Programs (Joan Brewster, University of Toronto and Michael Kaufmann, Ontario Medical Association)
- The Psychodynamics of the Work of Physicians: A Well-Being and Mental Health Issues (Marie-France Maranda, Université Laval)

JSPS-CIHR Joint Health Research Program

The following grant was supported under this new partnership program with the Japan Society for the Promotion of Science:

- Investigation of the mechanism of neuropathic pain: involvement of P2X4 and spinal microglia (Michael Salter, Hospital for Sick Children/University of Toronto)

OUTSTANDING RESEARCHERS IN INNOVATIVE ENVIRONMENTS

Strategic Training Program Grants

Our ability to achieve our research goals is dependent on the availability of a critical mass of skilled investigators in all aspects of neurosciences, mental health and addiction. One of INMHA's key priorities is to promote and sustain the development of trans-disciplinary programs of research and training and perhaps one of the most important programs we implemented is the Strategic Training Program Grants. The caliber of the scientists leading the training programs supported by INMHA to date is a window into the next generation of Canadian researchers. The following grants were funded through the second competition, bringing the number of INMHA supported training programs to 18 (each grant is for 6 years):

- Integrated training program in basic and clinical aspects of neuroinflammation (Jack Antel, McGill University), in partnership with III and FRSQ
- McGill integrative neurobehavioral training program: focus on regenerative medicine and early life events (Avi Chaudhuri, McGill University), in partnership with FRSQ
- Training program in autism research (Eric Frombonne, McGill University), in partnership with the National Alliance for Autism Research and FRSQ
- Building capacity in mental health and addictions services and policy research (Elliot Goldner, University of British Columbia), in partnership with IHSPR
- Transdisciplinary inter-institute training program in autism spectrum disorders (Jeanette Holden), in partnership with the National Alliance for Autism Research
- Culture and mental health services (Lawrence Kirmayer, McGill University), in partnership with IHSPR
- Genes, environment and health training program (Michael Meaney, McGill University), in partnership with IG and FRSQ

- Formation transdisciplinaire en recherche sur le suicide et sa prevention (Brian Mishara, UQAM), in partnership with FRSQ
- Tobacco Use in Special Populations Research training program (Peter Selby, University of Toronto), in partnership with CIHR
- CIHR strategic training program in vision health research (Hugh Wilson, York University)

Barbara Turnbull Award for Spinal Cord Research

Dr. Mohamad Sawan at the École Polytechnique de Montréal/ Université de Montréal was awarded the second annual Barbara Turnbull Award recognizing excellence in spinal cord research. Dr. Sawan was recognized for his project titled *Remote bladder volume measurement and implant monitoring and subsequent selective stimulation to enhance the voiding in spinal cord injured patients*. The grant received the highest rating from the September 2002 and March 2003 competitions.



Dr. Mohamad Sawan receiving the Barbara Turnbull Award from Dr. Rémi Quirion, Scientific Director, INMHA

The Brain Star Program

One of the first programs established by INMHA and perhaps our most successful, the Brain Star Program is aimed at recognizing outstanding young researchers in Canada. The award, given every two weeks, goes to emerging scientists still enrolled in their studies who have published their research findings in prominent scientific journals. The research topics span the entire spectrum of INMHA's mandate and amount to an impressive portfolio of published scientific knowledge. Every year, INMHA publishes a booklet showcasing the winners with a summary of their article and picture. Information on the program can be found on the INMHA website at www.cihr-irsc.gc.ca.

Brain Star of the Year

At the 2003 Annual Meeting, INMHA announced the Brain Star of the Year Award, to highlight the achievements of young researchers recognized by this popular program even further. The inaugural recipients of the Brain Star of the Year Award are Michelle Aarts of the University of Toronto, and Yitao Liu, affiliated to the Universities of Toronto and British Columbia. The team's outstanding paper, titled *Treatment of Ischemic Brain Damage by Perturbing NMDA Receptor- PSD-95 Protein Interactions*, was published in the journal *Science*. Data reported by the Awardees offer a novel strategy for treating stroke.

INMHA Sponsored Workshops, Conferences and Symposia in 2003-2004

From the beginning, INMHA has encouraged and supported a variety of events, from strategic priority setting workshops that feed into the INMHA strategic planning process to scientific and organizational gatherings. These “meetings of the minds” foster collaboration, knowledge exchange and communication of research results. The following is a partial list of events supported by INMHA in 2003-04:

International Conference on Cerebral Palsy, Québec City, April/May 2003

Alzheimer's Disease and Related Disorders, Canmore, May 2003

Symposium on Psychiatric Ethnoepidemiology, Halifax, May 2003

3rd World Child and Youth Health Congress, Vancouver, May 2003

Institut d'été international sur la catégorisation dans une perspective interdisciplinaire, Montréal, June/July 2003

Fetal and Neonatal Physiological Society, Banff, July 2003

Enteric Nervous System Symposium, Banff, July 2003

Autonomic Dysfunction after Spinal Cord Injury, Banff, July 2003

Peripheral Nerve Society Meeting, Banff, July 2003

World Congress of Psychiatric Genetics, Quebec City, October 2003

HUPO / IUBMB Joint World Congress, Montreal, October 2003

Second International Conference on Stigma of Mental Illness, Kingston, October 2003

GAMIAN – Europe Annual Educational Convention, Marseille, France, October 2003

GPCR Conference, Georgian Bay, October 2003

Canadian VHL Family Alliance National Meeting, London, Fall 2003

Protéines membranaires et perception de la douleur, Montréal, January 2004

Canadian Physiological Society, Vernon BC, January/February 2004

The Cost of Blindness, Toronto, January 2004

4th International Conference on Unstable Microsatellites and Human Diseases, Banff, February 2004

Events organized by INMHA

INMHA not only provides financial support to a wide range of events, but also is proactive in organizing priority setting workshops. For many of these meetings, we partner with other organizations who have a vested interest in the topic and in collaborating with INMHA. The following events were held in 2003-04 (see www.cihr-irsc.gc.ca for reports on some of these events):

Inter-provincial Forum on Problem Gambling Research

Toronto, September 2003

Problem gambling researchers and representatives of provincial funding agencies from across Canada and from INMHA, were invited to participate in this forum jointly sponsored by the Institute and the Ontario Problem Gambling Research Centre (OPGRC). Accordingly, the forum set the stage for future collaborative research by identifying priorities for collaborative interprovincially-funded research; developing mechanisms and structures by which collaborative initiatives can be mounted; and by establishing resources to support such initiatives.

Forum on Alcohol and Illicit Drug Research in Canada

Kanata, October 2003

Attended by participant representing a broad range of key stakeholders in the area of addictions, this Forum was co-sponsored by the Canadian Centre on Substance Abuse, the Canadian Executive Council on Addictions, Health Canada, the Solicitor General of Canada and two other CIHR

Institutes (Gender and Health, and Aboriginal Peoples Health). The purpose of the meeting was to develop a strategic addictions research agenda for Canada, ranging from basic to social, cultural and environmental research in relation to alcohol and illicit drugs. The workshop will lead to a Request for Applications to be announced in 2004.

Workshop on Early Life Events and First Episodes of Brain Disorders

Montreal, February 2004

The goal of this INMHA organized workshop was to invite a cross-section of the foremost scientists working in this field, and to develop a national research agenda on this important topic. The workshop is expected to lead to a Request for Applications in 2004.

2nd Annual Nanomedicine Workshop “Focus on Biophotonics”

Toronto, February 2004

Following on the success of the first workshop held in 2002, INMHA again led this workshop co-sponsored with Natural Sciences and Engineering Research Council. The special focus of this meeting was on Biophotonics, namely the application of the science and technology of light generation, transmission, and measurement to the life sciences and medicine. This event was open to anyone with an interest in Regenerative Medicine or Nanomedicine, and provided an excellent opportunity for scientists and interested individuals with similar or complementary backgrounds to engage in dialogue and build new working relationships.

TRANSLATING HEALTH RESEARCH INTO ACTION

CIHR Outreach Initiative

This unique initiative was conceptualized and developed by INMHA and is modelled after a similar program of the US National Institute of Mental Health. The first competition was co-sponsored by the Institute of Gender and Health and CIHR Communications Branch. The program offers awards of up to \$10,000 to enlist Canadian non-governmental organizations in partnership to help bridge the communications gap between science and the general public. The competition offered awards of up to \$10,000 for innovative promotional ideas that would take a given message to the public or targeted organizations. The four winners were announced at our 2003 Annual Meeting:

AUTISM SOCIETY CANADA received support for its *Autism Spectrum Disorders Training Program*. The program will share best practices in ASD screening and diagnosis with physicians, health professionals, educators and child care workers in order to increase Canada's capacity for early and effective screening for signs of developmental disability.

PARTNERS SEEKING SOLUTIONS WITH SENIORS and CREATIVE RETIREMENT MANITOBA was supported to create a website entitled *Seniors, Medication and Alcohol* that will provide research-based information about addiction and dependency issues among Manitoba's seniors.



The Honourable Michael Wilson

Second INMHA Annual Meeting, Toronto, November 2003

Our second annual meeting brought together over 100 participants from a broad number of INMHA stakeholders - trainees and Brain Star recipients, scientists from all four CIHR pillars and representatives from the voluntary sector and non-governmental organizations (VHO/NGO). The focus this year was on three major themes - pain, addiction and spinal cord injury. An expert in each respective field organized and planned the sessions, inviting four or five speakers to talk about his or her personal experience, including trainees and persons affected by the disorder. The sessions were extremely successful and responded to one of the key objectives of INMHA - to keep in close contact with our community. The same is true for trainees, who benefit from interacting with patient and advocacy groups. Perhaps the most gratifying aspect about the meeting was the threads that linked all three sessions, such as stigmatized patient populations and a lack of adequate support and knowledge by the medical and research communities. In addition, the common mechanisms involved in addiction, spinal cord injuries and pain, stood out. The science, too, is linked across our mandate and the left and right side of the brain community are coming together under the INMHA umbrella.

Honourable Michael Wilson, a well-known advocate for the cause of mental health and mental illnesses in Canada, summarized the development of a recent \$3 million announcement of the Brain Research Initiative by NeuroScience Canada, in partnership with INMHA and CIHR. In recognition of its ongoing efforts to encourage research and partnership in Canada, NeuroScience Canada was awarded the NGO/VHO of the Year Award. Other award

CANADIAN ALLIANCE ON MENTAL ILLNESS AND MENTAL HEALTH (CAMIMH) will be setting up its own stand-alone website (its site is presently hosted by the Mood Disorders of Canada's website) where it will address the public at large as well diverse stakeholders and partners, including CIHR, INMHA and other Institutes.

CANADIAN MENTAL HEALTH ASSOCIATION, ONTARIO will produce a strategically and widely disseminated booklet entitled *A Matter of Importance to Women: Weight Gain Associated with Psychotropic Medications*. The booklet validates women's concerns about weight gain, review the latest research and provide effective methods for dealing with the problem.



Dr. Eric Single receiving the inaugural plate for the Eric Single Addiction Studentship Award.



Mrs. Inez Jabalpurwala, President, NeuroScience Canada, receiving the NGO/VHO Award of the Year from Dr. Martin Steinbach, member of the IAB.

announcements included the winners of the CIHR Outreach Initiative and the Brain Star of the Year awards. Finally, we launched a new partnership with the Canadian Centre on Substance Abuse and the Ontario Problem Gambling Research Centre - the Eric Single Studentship award for research in addiction and gambling. Dr Single is internationally recognized for his exceptional work on social aspects of addictions including tobacco, gambling and illicit drugs.

The meeting also focused on upcoming challenges to foster even more INMHA relationships with interested non governmental organizations (NGOs) and voluntary health organizations (VHOs). Building stronger relationships with these organizations is a process we first undertook in 2001, when we organized two workshops with our stakeholders to better understand their priorities and needs. The key, quite simply, is to keep open lines of communication, to respect one another and to focus on those things we share in common (which are many!).

The Brain from Top to Bottom

Another INMHA supported initiative is the Brain from Top to Bottom, a website encyclopedia to popularize scientific information about the brain and human behaviours and aimed at various audiences. The site (www.thebrain.mcgill.ca) is a work in progress but has already received international recognition for its uniqueness, easy to use and up-to-date information.

EFFECTIVE PARTNERSHIPS AND PUBLIC ENGAGEMENT

We have adopted a collaborative approach to all of INMHA's activities, including the strategic planning process, evaluation of the Institute, development of specific strategic initiatives and joint funding programs. Partnerships and stakeholder involvement are key to the success of the Institute and the fulfillment of our mandate. The efficiency with which we advance our research agenda are enhanced by leveraging the efforts and resources of other organizations who share our mission. Our funding programs encourage our scientists to collaborate and leverage the expertise of their colleagues in other Canadian and international research institutions. Thanks to the broad mandate of INMHA, opportunities for collaborations are abundant and it is gratifying that we are working with a large number and wide array of partners nationally and internationally. Our work in this area is extensive and the below list outlines the results of our efforts.

Neurobiology of Psychiatric Disorders and Addictions Program

This new grants program was announced in 2003. The program is led by the Canadian Psychiatric Research Foundation (CPRF). Other partners are Astra-Zeneca and the CIHR/Rx&D Research Program. The results of the competition will be announced in 2004.

Vascular Health and Dementia Research Grant Program

This program was announced in 2003 and is led by the Heart and Stroke Foundation of Canada, in collaboration with the Alzheimer Society of Canada, the Institute of Aging, INMHA, Pfizer Canada Inc. and the CIHR Rx&D Research Program. The results of the first competition will be announced in 2004.

Canadian Community Health Survey on Mental Health and Well-being

This program funded 17 teams interested in the analysis of the Survey and is a partnership with Statistics Canada, the Ontario Problem Gambling Research Centre, the CIHR Rural and Northern Health Research Initiative, the Institute of Health Services and Policy Research and the Institute of Gender and Health. See page 8 & 9 for list of grants.

Eric Single Studentship

Announced at the 2003 INMHA Annual Meeting, this program is a partnership with the Ontario Problem Gambling Research Centre (OPGRC) and the Canadian Centre for Substance Abuse. The program is administered by OPGRC.

Physician Health in Canada

Through a new partnership with the Canadian Medical Association (CMA) and the CMA Centre for Physician Health and Well-Being, INMHA will co-sponsor two research projects that are expected to make a significant contribution to the current literature and understanding of physician health in Canada. See page 9 for list of grants.

NeuroScience Canada Brain Repair Program

This major funding program was announced at the 2003 Annual Meeting and is aligned with the CIHR Regenerative Medicine Initiative. The results of the competition will be announced in 2004.

Barbara Turnbull Award for Spinal Cord Research

This annual award to recognize excellence in spinal cord research is a partnership with the Barbara Turnbull Foundation and NeuroScience Canada. For information on the 2003 awardee, please see page 11.

Co-funding of INMHA New Investigator Award

The Schizophrenia Society of Canada partnered with us to support a New Investigator Award on schizophrenia. The grant was awarded in 2002 to Dr. Ridha Joober at the Douglas Hospital Research Centre, McGill University, for his project entitled "Genetics of Schizophrenia: From animal models to human studies".

Mindscapes – an exhibition of art works by persons affected by mental illness

Participating in the organization of Mindscapes presented at the National Gallery of Canada in May 2004 was one of INMHA's most unique endeavors in 2003-04. The efforts were led by the Canadian Mental Health Association in collaboration with the art workshop Les Impatients and many sponsors.

INTERNATIONAL PARTNERSHIPS

NIH Fogarty International Centre

INMHA interacts with a number of NIH institutes and has participated in two initiatives led by the NIH Fogarty International Centre. In 2003, we supported a Canadian-US collaboration working on Stigma.

International Brain Research Organization

INMHA became a member of IBRO in 2003. We co-sponsored the IBRO Neuroscience School on Epilepsy held in Cape Town, South Africa, in September 2003, one of a series of an advanced schools program to encourage former graduates and others to take up careers in neuroscience. Five Canadian researchers participated in the school as part of the faculty.

Japan Society for the Promotion of Science

INMHA initiated and led the negotiation for this new program with the Japan Society for the Promotion of Science (JSPS). Announced in 2003, the JSPS-CIHR Joint Health Research Program aims to support Japan-Canada collaborations. We also secured the participation of two other CIHR Institutes, the Institute of Human Development, Child and Youth Health and the Institute of Aging.

Society for Neuroscience and Canadian Association for Neuroscience

INMHA has joined forces with the the Canadian Association for Neuroscience and the Society for Neuroscience, a Washington, D.C.-based organization with over 30,000 members worldwide, to work together on a number of initiatives aimed at benefiting Canadian neuroscientists and the general public.

Dana Foundation

INMHA also collaborates with the Dana Foundation, a philanthropic foundation with principal interests in science, health, and education. In 2003, Dr. Quirion was invited to join the Dana Alliance for Brain Initiatives, a group of more than 200 distinguished neuroscientists, formed to help provide information about the personal and public benefits of brain research.

ORGANIZATIONAL EXCELLENCE

As CIHR and the Institute support scientific excellence, we also strive for excellence in how we conduct our day-to-day business. Our efforts are dedicated to the fulfilment of our mandate and the objectives outlined in our first Strategic Plan. As the INMHA team is very small, individual effort goes above and beyond. Nowhere is this as apparent as with INMHA's Scientific Director, Rémi Quirion, whose leadership is inspirational to his staff and the INMHA community. In 2003, he received three major honours. He was named the inaugural Champion in Mental Health Research by the National Coalition for Mental Health and Mental Illness. He was also inducted into the Royal Society of Canada and the Ordre National du Québec.

Leadership is also provided by each and every member of the Institute Advisory Board (IAB). All of them participate in at least one of our IAB Focus Groups, including NGO & Government Affairs, Training & Education, Industry and International. Through the 2003 IAB renewal process, INMHA appointed four new members, while three members have reached the end of their terms. Retiring members are Dr. Jack Jhamandas of the University of Alberta, Dr. Robert Ladouceur of Université Laval, and Dr. Bruce McEwen, of

Rockefeller University. Each new IAB member brings in specific expertise and experience. Dr. Kathryn Bennett of McMaster University brings her expertise in population health; Dr. Patrice Roy of Pfizer Canada the unique viewpoint from the pharmaceutical sector as well as his background in neurosciences; Dr. Jane Stewart of Concordia University her expertise in the area of addiction; and Dr. Douglas Zochodne of the University of Calgary his expertise in neurology. Summaries of the IAB meetings are available on the INMHA website.

The Institute staff team is comprised of four members at the INMHA office in Montreal, three members in Ottawa (including part-time support) and one member in Toronto. Indirect support is also provided by the various departments at CIHR central office in Ottawa, most notably within the Research Portfolio where responsibility lies for competition management and peer review. Support also extends the other way and INMHA staff and IAB members participate in many CIHR central committees and working groups, assisting with activities such as renewal of the CIHR peer review process, website design and development of various partnership and program policies and guidelines.

The virtual institute model has many benefits but also brings many challenges and internal communication is vital to the overall success of the organization. To educate our colleagues in Ottawa about INMHA, we held an Institute Day in January 2004, successfully showcasing every aspect of our work. As the virtual model extends to the INMHA team itself, we also organized a staff retreat to ensure that our personal objectives are aligned appropriately with those of the Institute. We believe that INMHA is a fascinating work environment and every day brings with it new challenges. The Institute will be a tough career act to follow but some succeed – Justin Kingsley left his position as Head of Communications in December 2003 to join the Prime Minister's Office.

With the established expertise of our staff and the wise counsel of our Institute Advisory Board, we anticipate another successful year.

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

The mission of INMHA is to foster excellence in innovative ethically responsible research in Canada that aims to increase our knowledge of the functioning and disorders of the brain and the mind, the spinal cord, the sensory and motor systems, as well as mental health, mental illness and all forms of addiction. INMHA seeks to translate this new knowledge into a better quality of life for all Canadians through improved health outcomes, health promotion and health care service.

Vision

INMHA believes that innovative ethically responsible research will provide new knowledge of the biological and socio-cultural processes underlying neurological, mental and addictive disorders.

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, 2004

STRATEGIC INITIATIVES	Number	Contributions through Grants and Awards				
		2003-04	2004-05	2005-06	2006 and beyond	Total
Canadian Community Health Survey	4	\$ 118,665	\$ –	\$ –	\$ –	\$ 118,665
Invention – Tools, Techniques and Devices	1	98,943	98,943	90,698	–	288,584
Reducing Health Disparities	2	20,000	–	–	–	20,000
Ice Teams	1	100,000	100,000	100,000	175,000	475,000
Understanding the Placebo Effect	1	242,000	240,000	240,000	480,000	1,202,000
Regenerative Medicine-Neuroscience	1	146,220	146,220	146,220	292,440	731,100
Post-Traumatic Stress Disorder	2	465,399	432,546	442,246	884,492	2,224,683
Operating Grants	12	657,476	113,798	771,274	–	–
Knowledge Translation Applications	5	99,666	73,334	10,000	–	183,000
New Emerging Team Grant Program (NET Program)	8	1,041,751	1,041,351	1,041,350	975,844	4,100,296
Access for Marginalized Groups	2	48,198	13,340	61,538	–	–
Training Awards	21	596,523	433,125	166,664	137,500	1,333,812
National Network for Aboriginal Mental Health Research & Training	1	85,387	87,133	58,427	–	230,947
Health Research Partnership Program	1	20,750	3,167	–	–	23,917
Gene Therapy-Neuroscience Diseases	1	125,000	–	–	–	125,000
Strategic Training Initiative in Health Research	14	1,641,390	2,038,845	2,045,094	5,980,801	11,706,130
Palliative End of Life Care		61,149	61,149	–	–	–
Stigma Global Health	1	58,333	100,000	100,000	41,667	300,000
EJLB Foundation Chairs	1	50,000	50,000	50,000	100,000	250,000
	79	\$ 5,615,700	\$ 5,032,951	\$ 4,490,699	\$ 9,067,744	\$ 24,207,094

* 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 2003-04 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, 2004

Total funds available		A	\$ 1,104,839
EXPENDITURES			
Institute Development			
Conference, symposia and workshops	\$ 657,785		
Institute Advisory Board expenditures	61,832		
Professional Services	38,525		
Travel Expenditures	105,818		
Other costs	39,693		
		Subtotal	\$ 903,653
Institute Operations			
Salaries and benefits	\$ 417,132		
Telephone and communication services	9,051		
Supplies, material and other services	10,516		
Computer equipment and IT support	726		
Professional Services	54,523		
Travel expenditures	18,040		
		Subtotal	\$ 509,988
Total expenditures		B	\$ 1,413,641
UNSPENT BALANCE		A - B	\$ - 308,802

GRANTS AND AWARDS AFFILIATED TO INMHA

Year 2003-2004

No. of Grants and Awards (not including the Networks of Centres of excellence and Canada Research Chairs)	1,160
Total funded (in thousands of dollars)	\$ 85,586