Introduction

By 2020, brain disease will overtake heart disease and cancer as the leading cause of death and disability in Canada. A recent World Health Organization report identifies depression as the second leading cause of the lifetime burden of disease; four other forms of mental ill health – including tobacco and alcohol addiction – round out the top ten.

Meanwhile, societal pressures have created new ghettos of vulnerable populations, including Vancouver’s Downtown Eastside and First Nations communities throughout BC. Responding to the needs of these communities requires not only improving our understanding of the brain, but also improving brain health care delivery and our understanding of how addictions modify behaviour.

The Institute’s interdisciplinary vision spans the faculties of Medicine, Nursing, Education, Law and Arts, with the department of Psychiatry playing the leadership role.

Today, over 90 basic and clinical scientists have become Founding Fellows of the Institute of Mental Health. The Executive Advisory Board is now convening in its third session. This document provides a snapshot for the Board of the Institute’s recent and past activities inclusive of the colloquia, workshops, seminars and conferences that serve to encourage cross-fertilization of ideas.

This engagement has enabled the Institute of Mental Health to play a major role in the recruitment of outstanding scientists.

Our institute will be a home for a community of clinicians and scientists who are fully committed to a re-examination of the field of mental health and mental illness and to seeking new insights into the diagnosis and treatment of some of the most challenging issues in modern medicine.

Dr. Anthony Phillips, Founding Director, IMH
IMH Founding Director Anthony Phillips moderated a discussion among the Dalai Lama and leading researchers on the topic of enhancing authentic happiness and physical well-being. This highly successful event, held at the Orpheum Theatre, featured presentations by Allan Young, Director of the IMH, as well as:

- Edward Diener, Alumni Professor of Psychology at the University of Illinois
- Sonja Lyubomirsky, Professor of Psychology at the University of California
- Paul Ekman, Emeritus Professor at the University of San Francisco
- Michael Meaney, James McGill Professor of Medicine and Director of the Program for the Study of Behaviour, Genes and Environment at McGill University
- Dacher Keltner, Director of the Berkeley Social Interaction Lab and Co-Director of the Center for the Development of Peace and Well-Being
- Deepak Chopra, best-selling author

The Institute played an active role in organizing a series of academic lectures held to complement the world premiere of The Dream Healer, an opera based on Timothy Findley’s Pilgrim, which focuses on Carl Jung’s time at the Burghölzli Clinic. Three lectures – The Stigma of Living with Mental Ill Health; CG Jung: The Man and the Myth; and Compassionate Approaches to Mental Ill Health – were held at the Chan Centre and were open to all. Professor Nancy Hermiston, who heads the voice and opera division at the School of Music and who directed the production, said, “It’s a fantastic collaboration. And I think this is what universities should be doing: leading the dialogue in these kinds of issues.”

In April 2008, the Institute sponsored a three-day conference at the UBC Life Sciences Centre entitled Cracked but not Broken, which addressed the current crisis in methamphetamine addiction. The conference, spearheaded by Dr. Michael Krausz, BC LEEF Chair in Addiction Research, brought together experts and stakeholders from various continents, cultures, and disciplines to share their unique experiences and solutions on stimulant abuse. Focusing on the particular vulnerabilities in youths, the conference examined questions in pregnancy and stimulant use, concurrent disorders, physical and mental illness associated with stimulant use, and the best evidence-based pharmacological and psychosocial treatments for adolescents. In August 2008, IMH Founding Director Anthony Phillips chaired the 12th international Conference on in vivo methods, entitled Monitoring Molecules in Neuroscience. The conference provided a platform to facilitate the development and refinement of methods for the detection of chemicals in the brain. Historically, this meeting has been an important forum for such progress and for standardization of methodology. In addition, as the meeting has evolved, it has taken on a substantial emphasis on state-of-the-art applications of neurochemical techniques ranging from studies conducted in single cells to those in living humans. An IMH Master-Class in Bipolar Disorder was held in January 2009. An international faculty of leading research updated UBC researchers on the latest developments in the field. The meeting was entirely supported by an unrestricted educational grant from AstraZeneca.
Partnership Programs (cont’d)

Grant Winners

The Depression Research Fund is funded by Coast Capital Savings Credit Union annual golf tournament. Coast Capital Savings Credit Union has raised funds through its annual golf tournament for the benefit of depression research.

In association with the UBC Institute of Mental Health (UBC IMH) and VGH & UBC Hospital Foundation, Coast Capital Savings Credit Union wishes to support new research ideas identified by investigators in British Columbia. The intent of this competition is to fund new areas of research (e.g., new hypotheses, new techniques, new ideas) that are in a pilot/feasibility state that will lead to significant external funding to support the next step in an exciting new research direction.

Two levels of funding made available through the Coast Capital Saving Credit Union Fund are:

1. Coast Capital Young Investigator Grants; and
2. Coast Capital Independent Investigator Grants.

In 2008, the Coast Capital Savings Depression Research Fund competition attracted sixteen grant applications in both the Independent and Young Investigator categories.

The deadline for applications to this new competition was December 1, 2008 and a review panel consisting of Heather Craig, Rennie Hoffman, Dr. Tony Phillips, Dr. Allan Young, and Dr. Trevor Young met on December 17, 2008 to choose the successful grant applications, which are as follows:

Investigator: David Bond
Co-Investigator: Lakshmi Yatham
Project Title: A randomized, single-blind comparison of lamotrigine add-on versus switch to lamotrigine monotherapy in the treatment of bipolar II depression unresponsive to antidepressant treatment.
Grant Allocated: $30,000

Investigator: Nichole Fairbrother
Co-investigators: Patricia Janssen, Mark Lau
Project Title: Postpartum mood disorders: prevalence, co-morbidity and risk factors.
Grant Allocated: $12,000

Investigator: Raymond Lam
Co-Investigators: Andrew Clarke, Erica Frank, Dorothy Shaw
Project Title: EXCITED (Extending Care using Internet Treatment for Employees with Depression)
Grant Allocated: $54,000

Investigator: Bradley Vines
Co-Investigator: Jon Stoessl
Project Title: Treating depression in Parkinson’s disease with transcranial direct current Stimulation
Grant: $30,000

Investigator: Joanne Weinberg
Project Title: The role of hypothalamic-pituitary-adrenal (HPA) axis dysregulation in the causes and treatment of depression.
Grant: $54,000

These successful applicants have been invited to participate in the Coast Capital Savings Credit Union Charity Golf Tournament banquet on June 25, 2009 to share their research objectives and progress.
Partnership Programs (cont’d)

Colloquia

Since the fall of 2006, the IMH has sponsored an annual series of talks by distinguished researchers in mental health at universities across North America. Many of the talks were co-sponsored by the Brain Research Centre, National Core for Neuroethics or a Department in the Faculty of Medicine.

To date there have been 28 talks in the colloquia series. The diverse colloquia topics have included:

- Mother Nature and Mother Nurture in Mothers’ Depression and Children’s Antisocial Behaviour
- Is there a Biology of Misfortune? Social Position, Biological Sensitivity, and Child Mental Health
- Unraveling the Molecular, Cellular and Systems Mechanisms of Remote Memory
- Remembering, The Default Mode, and Alzheimer’s Disease
- The Plastic Human Brain: Implications for Translational Neuroscience and Education.
- Neurotransmitter Transporters: New Insights into Structure, Function, and Pharmacology
- Turning up the Heat: Inflammation as a Mechanism Linking Chronic Stress, Depression, and Heart Disease
- The Foundation of Human Numerical Thinking: Implications for Understanding Dyscalculia
- Producing and Perceiving Vocal Communication Signals
- Mapping Brain Maturation and Cognitive Development During Adolescence
- The Polyvagal Theory: Insights into the Neurobiology of Psychiatric Disorders and Behavioural Problems
- Issues in Native Mental Health and Research Challenges
Dr. Allan Young  
*Director of the UBC Institute of Mental Health, Leading Edge Endowment Fund Chair in Depression Research and Professor in the UBC Department of Psychiatry.*  
Appointed November 2005

“Mental health problems are so common that everyone has them in their wider family,” says Dr. Young. “Whether it’s an elderly relative with Alzheimer’s, a child with learning disabilities or someone experiencing depression – it’s there.” Dr. Young’s research concentrates on the causes and treatment of severe mental disorder, particularly clinical depression. Very interested in the causes of depression, he has directed much of his work to understanding how environmental stresses contribute to depressive symptoms. He is also trying to develop new treatments that can help with these.

“What’s happening here at UBC is really exciting,” he says. “We have this magnificent endowment that has allowed the Institute of Mental Health to be established, we have a university with a very good tradition of high-class research, and we have support from local stakeholders, including the families of people who’ve suffered from severe mental ill-health.”

Dr. Young received his MD and PhD from the University of Edinburgh. Following postgraduate studies at the University of Edinburgh and the University of Oxford, he obtained his MRC Psych in 1988 and FRCPsych in 2003. He came to UBC from the University of Newcastle upon Tyne.

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Dr. L. Trevor Young  
*Head of UBC Department of Psychiatry*  
Appointed in November 2006.

As an active clinician scientist in the area of bipolar disorder, Dr. Young’s principal research interest include understanding the molecular basis of bipolar disorder and its treatment, and how to apply these findings to the clinical setting. He is widely published and well funded by peer-reviewed granting agencies in these areas. His research is particularly focused in understanding the processes that lead to long-term changes in brain structure and function in patients with bipolar disorder and how these changes can be targeted by the neuro-protective effects of mood stabilizing drugs.

Dr. Young has led several large clinical programs for patients with mood disorders including the Mood Disorders Program at Hamilton Psychiatric Hospital, which received the American Psychiatric Services Gold Achievement Award. In 2003 he was awarded the Douglas Utting Award for outstanding contributions in the field of mood disorders. In 2006 he was appointed a Distinguished Fellow of the American Psychiatric Association and received the Canadian College of Neuropsychopharmacology Heinz Lehmann Award for outstanding contributions in the field of research in neuropsychopharmacology in Canada.

Dr. Young received his medical degree at the University of Manitoba. This was followed by residency training at McGill University and the University of Toronto where he also completed his PhD in Medical Sciences. He completed a Research Fellowship at Johns Hopkins University in Maryland. His former roles include Physician-in-Chief, Executive Vice President Programs at the Centre for Addiction and Mental Health, and Professor and Cameron Wilson Chair in Depression Studies in the Department of Psychiatry at the University of Toronto. He currently holds an adjunct faculty member position at Rockefeller University in New York.
Dr. Judy Illes
Canada Research Chair in Neuroethics
Appointed in the Department of Medicine, March 2007

Ever question the ethics or science behind advertising? Well, Professor Judy Illes does. In fact, Illes, Director of the National Core of Neuroethics at UBC, is exploring the ethical issues around neuro-marketing, an emerging field of marketing that uses neuroscience to get you hooked on the latest fad. “The field of neuroscience is evolving at a rapid rate,” says Illes, who is also a Canada Research Chair in Neuroethics. “Advances in scientific technologies can give us intimate details about the inner workings of our brain. Neuroethics considers the social, cultural, personal and religious implications of these advances in neuroscience.”

Neuromarketing uses neuroscience to study the brain’s responses to marketing stimuli. It aims to understand a consumer’s decision and the part of the brain that influences that decision.

“There are three major ethical issues for consideration,” says Illes. “First, we must protect parties who may be harmed or exploited by neuromarketing. Second, we must protect consumer autonomy if neuromarketing reaches a critical level of effectiveness and third, we must protect scientific integrity.” “The particularly loose restrictions surrounding studies for marketing purposes outside the academic sector are especially worrying,” says Illes. Moreover, if new technologies are developed that fall outside the purview of regulatory authorities, even these protections may be lost. Subject protections should be equal to those required by academic and medical research centres.”

(Excerpted from “Can Brain Science Manipulate Consumers?” by Catherine Loiacono. UBC Reports, April 2009)

Dr. Richard Pico
Head of the Department of Psychiatry, St. Paul’s Hospital
Appointed in September 2007

Richard Pico is also a Clinical Professor in the Department of Psychiatry at UBC, and the Senior Advisor, Advanced Information Technology and Clinical Transformation at the Provincial Health Services Authority. As a researcher, Pico was principal or co-principal investigator in studies of medication use in adolescent schizophrenia, military-induced stress responses in servicewomen, and neuroanatomical and neuropsychological correlates of psychosis. Educated in California, Pico received a PhD in Neurobiology and an MD from the University of California, Irvine. He completed a residency in Psychiatric Medicine at Wilford Hall Medical Center in San Antonio, Texas. Pico came to St. Paul’s Hospital following five years as the Chief Medical and Technology Officer at Perot Systems Healthcare, Dallas, Texas. Prior to that, he was Vice President, Chief Medical Officer and Head, R&D for Nexthealth-Empire Blue Cross Blue Shield in New York. He has held academic positions at California State University, University of California, Los Angeles, Wilford Hall Medical Center, Mount Sinai Medical Center and School of Medicine, and New York University.

In addition to many peer-reviewed reports, abstracts and book chapters, Pico is also the author of Consciousness in Four Dimensions: Biological Relativity and the Origins of Thought, published in 2002 by McGraw Hill.
Dr. Michael Krausz
Leading Edge Endowment Fund Chair in Addiction Research
Appointed in the Department of Psychiatry in February 2007.

“If you are not investing in innovative strategies, you are not moving forward in solving the pressing issues of today,” says Dr. Michael Krausz, UBC Professor of Psychiatry and a clinician at St. Paul’s Hospital. Krausz brings his international expertise in concurrent disorders – the dual diagnosis of mental illness and drug addiction – to address the mental health crisis in Vancouver’s Downtown Eastside. Krausz believes in a holistic approach to treating concurrent disorders as well as a collaborative effort among health authorities, universities and government. Widely recognized as a world authority on addiction treatment, Krausz has dedicated his professional life to treating substance abuse and mental illness. By the mid-1990s he was leading one of the world’s largest addiction trials at the University of Hamburg. Krausz was instrumental in the implementation of the German Methadone Program and the European Cocaine Project. It was through this work that he started to make the connection between concurrent disorders. He also found that improved treatment led to crime reduction. Vancouver’s current situation reminds Krausz of the open drug scenes that existed in Europe in the 1980s and 1990s. He believes Vancouver’s situation poses a greater challenge in that homelessness is compounded with substance abuse and mental illness.

“What you see is that a high percentage of individuals are mentally ill and have no place to live,” says Krausz. “This has also led to higher mortality rates. In this population, persons are dying two decades earlier due to suicide, overdoses and HIV/AIDS.”

(Excerpted from “UBC Psychiatry Prof. to Help Lead Mental Health Collaboration for Vancouver’s Downtown

The establishment of the UBC Institute of Mental Health added a whole new dimension to the psychiatric research taking place here, and was a long overdue recognition of the toll exacted by mental illness and addictions. Their gift allowed us to delve into traditionally neglected areas, such as child and adolescent psychiatry, geriatric psychiatry and psychotherapy, and to pool resources and expertise in ways that stretch traditional academic boundaries.

– L. Trevor Young