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The Centre for Integrative Mood Research (CIMR)

The CIMR is established at University Health Network to promote the understanding of depression and mood disorders; to develop innovative evidence-based therapeutic interventions, and to disseminate and apply this knowledge to the general public, the health care community, and policy makers.



Upcoming Events

CONFERENCE

- The International Society for Affective Disorders and the Canadian Network for Mood and Anxiety Treatments present a joint meeting in Toronto April 8-9, 2011: **"Mood Disorders: Neuroscience to Treatment"**

Register online at https://events.cepd.toronto.ca/startup/new_recovery/PSR1165

Contact: susan.rotzinger@uhn.on.ca for more information

ISAD 2011 Regional Conference Toronto: Mood Disorders - Neuroscience to Treatment

April 8-9, 2011
Toronto, Ontario, Canada

Toronto Marriott Downtown Eaton Centre

Registration now open!
www.cepd.toronto.ca
Course PSR1165

Plenary Lecture
Jeffrey Meyer MD, University of Toronto
Insights from Neurochemical Imaging

- **Chronobiology and Mood Disorders**
Trevor Young MD, University of Toronto
Colin Shapiro MBBS, PhD University of Toronto
Fred Turek PhD, Northwestern University
- **Atypical in Mood Disorders**
Roger McIntyre MD, University of Toronto
Pierre Blier MD, PhD, University of Ottawa
Sidney Kennedy MD, University of Toronto
- **Stress Biology and Mood Disorders**
Allan Young MD, PhD University of British Columbia
Robert Levitan MD, University of Toronto
Joanna Weinberg PhD, University of British Columbia
- **Neurocircuitry of Psychotherapies**
Glenda MacQueen MD, University of Calgary
Jan Scott MD, University of Newcastle, UK
Zindel Segal PhD, University of Toronto

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Research News: Biomarkers

The Canadian Depression Biomarker Network

Under the leadership of Dr. Sidney Kennedy, Dr. Alastair Flint and Dr. Roger McIntyre, the CIMR has recently joined forces with academic centres across Canada to form the Canadian Depression Biomarker Network (CDBN), with generous financial support from Lundbeck www.lundbeck.com

This project brings together researchers from University Health Network, McMaster University, Queen's University, the University of Calgary and the University of British Columbia. The CDBN will work collaboratively with the Ontario Cancer Biomarker Network (www.ocbn.ca) which will provide proteomics, genomics and bioinformatics expertise under the leadership of Dr. Ken Evans.

The overarching objective of the project is to address the chasm between advances in the neuroscience of mood disorders and progress in treatment efficacy, with the intent of developing a personalized medicine approach to the diagnosis and treatment of mood disorders.

Mood disorders are highly prevalent, disabling conditions that affect 1 in 5 Canadians in their lifetime, and are associated with enormous personal, societal and economic costs. Despite advances in psychological, pharmacological and somatic therapies, remission rates after a first treatment intervention

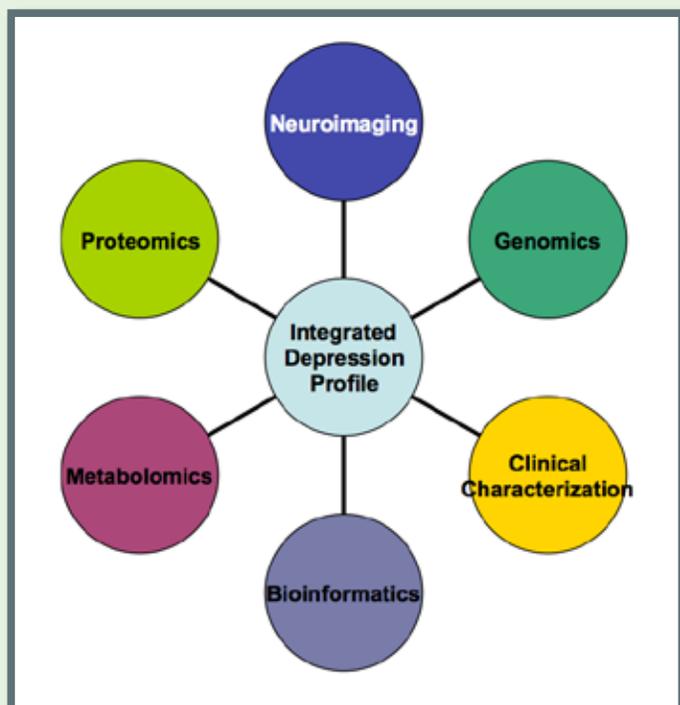
for a major depressive episode (MDE) are approximately 30%, in both major depressive disorder (MDD) and bipolar disorder (BD).

We hypothesize that differences in the presentation of symptoms in depression, and differences in treatment response, are associated with different molecular profiles among individuals with mood disorders. There is a significant unmet need for the discovery of biological markers or biomarkers of mood disorders. Biomarkers are objective measures that can be evaluated as indicators of normal or pathogenic processes, as well as response to treatment. Predictors of treatment response will increase the accuracy of diagnosis and lead to a personalized medicine approach to treatment.

The goal of personalized care is to integrate each person's unique combination of genetic and biological characteristics, as well as environmental influences into treatment strategies. In clinical psychiatry, this involves at least four domains: (1) clinical characteristics (personality, cognition, symptom profile); (2) neuroimaging (structural and functional), (3) molecular or biochemical indices (including

genomics, metabolomics and proteomics) and (4) genetic variation.

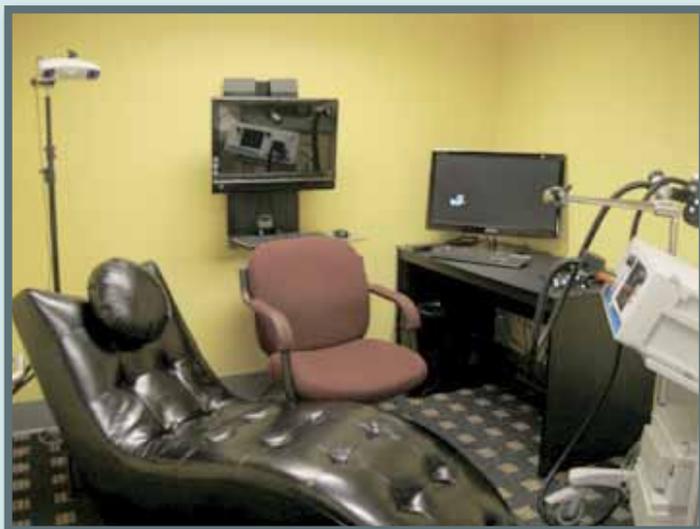
Patients with major mood disorders will receive an extensive clinical characterization based on traditional DSM-IV criteria for MDD, BD-type I or II (BDI/II) and any comorbid axis I-III diagnoses, as well as additional personality and neurocognitive assessments. Investigational symptom inventories will be administered, and biological samples will be collected



at baseline and post-treatment timepoints for genomic, metabolomic, proteomic and genetic analyses; neuroimaging data pre and post-treatment will also be obtained. Healthy controls will receive a similar evaluation, providing a universal control group and a source of valuable normative data.

MRI-Guided Repetitive Transcranial Magnetic Stimulation (rTMS) Clinic Opens at Toronto Western Hospital:

Drs. Peter Giacobbe and Jonathan Downar are delighted to announce the establishment of a new service within the Department of Psychiatry, offering repetitive transcranial magnetic stimulation, or rTMS.



rTMS is an emerging treatment for depression and other forms of psychiatric and neurological illness. With improvements in technique, rTMS has been increasing steadily in efficacy over the last 15 years, and was approved by Health Canada for the treatment of depression in 2002. rTMS has now proven itself as a safe and effective treatment for depression and refractory depression in several large RCTs and meta-analyses over the last 5 years. It is currently being offered at hundreds of academic and non-academic medical facilities around the world. For 2011, we are pleased to bring a dedicated rTMS service to UHN, already a recognized world leader in neurostimulation treatments.

The UHN rTMS service will initially be open to referrals for outpatients and inpatients with unipolar or bipolar depression and postpartum depression.

We hope to eventually expand the referral base to include eating disorders, obsessive-compulsive disorder, impulse control disorders, refractory auditory hallucinations, and refractory delusions. The rTMS service will have a major focus on conducting basic science and clinical research trials to improve the efficacy of rTMS for these disorders. The clinic is equipped with state-of-the-art technologies, including MRI-guided neuronavigation and robust dosing parameters, to give the best chances of a successful treatment outcome.

The clinic's advanced rTMS and neuronavigation equipment required a fundraising effort of \$120,000 in philanthropic donations and grant support over the last 6 months. We are deeply grateful to Christopher Luginbuhl, Ben Varadi, Ronnen Hariri, the Department of Psychiatry, and the Toronto General and Western Hospital Foundation for their indispensable support in establishing the UHN rTMS service.



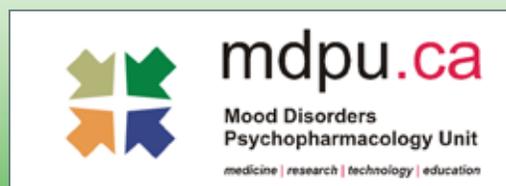
Left to right: Dr. Peter Giacobbe, Dr. Sidney Kennedy, Dr. Jonathan Downar.

Clinical Trial Opportunities:

We have several trials ongoing for the treatment of Depression. If you are interested in participating, please contact the study coordinator at 416-340-4800 ext. 8839.

Patients with a diagnosis of Bipolar Disorder may participate in one of our upcoming medication trials.

To find out more, please contact Hanna at (416) 603-5133 or visit www.mdpu.ca



Deep Brain Stimulation Investigational Studies

We are currently accepting patients for two separate clinical trials investigating the safety and efficacy effects of Deep Brain Stimulation (DBS) in

- i) **Refractory Depression** (35-70 years of age, have refractory unipolar major depressive disorder, and have failed to respond to multiple treatments for depression)
- ii) **Chronic and severe OCD** (at least 18 years of age and have failed to respond to multiple treatments for OCD)

DBS delivers mild pulses of electrical current from a surgically implanted device to a targeted area of the brain.



For more information on these studies, please call the study coordinator at 416-340-3466

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