

**The University of Ottawa
Institute of Mental Health Research (IMHR)**



2004 Research Report

The University of Ottawa Institute of Mental Health Research (IMHR) 2004 Research Report

This year's annual research report is the first Research Report in the short history of the IMHR. It highlights some of the Institute's research activity in 2004. Two of the main parameters that reflect excellence in research include peer-reviewed publications and the competitive research funding obtained. In 2004, our researchers published over 65 peer-reviewed papers. Peer-reviewed funding from national and international agencies was at an all-time high level with IMHR-affiliated projects bringing in \$3,452,540. Likewise, industry sponsored funding was also at an all-time high, totaling approximately \$2,069,191. The total research funds attracted by IMHR researchers amounted to \$5,521,731 – almost tripling of the funding base in three short years! Congratulations to our researchers.

The new Royal Ottawa Hospital currently under construction will include a research tower that will house the University of Ottawa Institute of Mental Health Research (IMHR). This new facility, expected to open in December of 2006, will completely replace the current research space. This new cutting-edge facility will include “Dry Labs” (Clinical Research Space), “Wet Labs” (for bench top cellular, molecular and genetic research), as well as educational and administrative infrastructure. In future, this facility will also house a Brain Imaging Suite and a small animal vivarium. The new site will enable all of the research units to be located in the same general area (three contiguous floors), and foster basic researchers and clinicians to work collaboratively shoulder-to-shoulder. This facility will also help us to continue to attract some of the best clinician-scientists in the field of mental health research.

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Papers Published in Peer-Reviewed Journals

1. A. Aluoja, M. Leinsalu, J. Shlik, V. Vasar, and K. Luuk. Symptoms of depression in the Estonian population: prevalence, sociodemographic correlates and social adjustment. *J Affect. Disord.* 78 (1):27-35, 2004.
2. N. Awad, M. Gagnon, and C. Messier. The relationship between impaired glucose tolerance, type 2 diabetes, and cognitive function. *J Clin Exp. Neuropsychol.* 26 (8):1044-1080, 2004.
3. N. Awad, M. Tsiakas, M. Gagnon, V. B. Mertens, E. Hill, and C. Messier. Explicit and objective scoring criteria for the Taylor complex figure test. *J Clin Exp. Neuropsychol.* 26 (3):405-415, 2004.
4. M.C. Bann, C.B. Parker, J. Bradwejn, J.R.T. Davidson, B. Vitiello, K.M. Gadde. Assessing Patient Beliefs in a Clinical Trial of Hypericum Perforatum in Major Depression. *Depression and Anxiety.* 20:114-122 (2004).
5. M. Bauer, P. Grof, L. Gyulai, N. Rasgon, T. Glenn, and P. C. Whybrow. Using technology to improve longitudinal studies: self-reporting with ChronoRecord in bipolar disorder. *Bipolar Disord.* 6 (1):67-74, 2004.
6. P. Blier. How many good antidepressant medications have we missed? *J Psychiatry Neurosci* 29 (4):248-249, 2004.
7. P. Blier. Un nouveau defi! *J Psychopharmacol* 18 (2):147, 2004.
8. P. Blier, G. Gobbi, N. Haddjeri, L. Santarelli, G. Mathew, and R. Hen. Impact of substance P receptor antagonism on the serotonin and norepinephrine systems: relevance to the antidepressant/anxiolytic response. *J Psychiatry Neurosci* 29 (3):208-218, 2004.
9. D. Bourget and L. Whitehurst. Capgras syndrome: a review of the neurophysiological correlates and presenting clinical features in cases involving physical violence. *Can J Psychiatry* 49 (11):719-725, 2004.
10. P. Boyer, V. Mahe, and D. Hackett. Social adjustment in generalised anxiety disorder: a long-term placebo-controlled study of venlafaxine extended release. *Eur Psychiatry* 19 (5):272-279, 2004.
11. H. Caci, P. Robert, and P. Boyer. Novelty seekers and impulsive subjects are low in morningness. *Eur Psychiatry* 19 (2):79-84, 2004.
12. D. Cohen, P. Gerardin, P. Mazet, D. Purper-Ouakil, and M. F. Flament. Pharmacological treatment of adolescent major depression. *J Child Adolesc Psychopharmacol* 14 (1):19-31, 2004.

13. N. Demidenko, P. Grof, M. Alda, D. Deshauer, and A. Duffy. MMPI as a measure of subthreshold and residual psychopathology among the offspring of lithium responsive and non-responsive bipolar parents. *Bipolar Disord.* 6 (4):323-328, 2004.
14. D. Deshauer. Physicalism and its discontents. *Canadian Journal of Psychiatry* 2004.
15. L. Du, D. Bakish, A. Ravindran, and P. D. Hrdina. MAO-A gene polymorphisms are associated with major depression and sleep disturbance in males. *Neuroreport* 15 (13):2097-2101, 2004.
16. L. Du, M. Poulter, P. Hrdina, M. Palkovits, G. Faludi, H. Anisman, Z. Merali. Concomitant changes of corticotropin releasing hormone (CRH), CRH receptor mRNA and GABA_A receptor subunit mRNA expression in frontal cortical brain regions of depressed suicides and controls. *Journal of Neuroscience* 24:1478-1485, 2004.
17. S. J. Farrell and E. D. Reissing. Picking up the challenge: developing a methodology to enumerate and assess the needs of the street homeless population. *Eval.Rev.* 28 (2):144-155, 2004.
18. S. Farrell, E. Reissing, S. Evans, and J. Taylor. Using community collaboration to develop the first successful needs assessment of the street homeless population in Canada. *J Interprof.Care* 18 (2):197-201, 2004.
19. M. Foot and D. Koszycki. Gender differences in anxiety-related traits in patients with panic disorder. *Depress.Anxiety*, 2004.
20. P. Fossati, A. Radtchenko, and P. Boyer. Neuroplasticity: from MRI to depressive symptoms. *Eur Neuropsychopharmacol* 14 Suppl 5:S503-S510, 2004.
21. N. Haddjeri, C. Faure, G. Lucas, O. Mnie-Filali, G. Chouvet, B. Astier, B. Renaud, P. Blier, and G. Debonnel. In-vivo modulation of central 5-hydroxytryptamine (5-HT_{1A}) receptor-mediated responses by the cholinergic system. *Int J Neuropsychopharmacol*:1-9, 2004.
22. N. Haddjeri, N. Lavoie, and P. Blier. Electrophysiological Evidence for the Tonic Activation of 5-HT(1A) Autoreceptors in the Rat Dorsal Raphe Nucleus. *Neuropsychopharmacology*, 2004.
23. D. Holmes & D. Gastaldo. Rhizomatic Thought in Nursing: An Alternative Path for the Development of the Discipline. *Nursing Philosophy*, 5, 1-10, 2004.

24. D. Holmes & D. Gastaldo. The Ontology of Nursing. In Pamela G. Reed, Nelma. C. Shearer & Leslie H. Nicoll (Eds). *Perspectives on Nursing Theory* – 4th Edition. Philadelphia: Lippincott Williams & Wilkins. (Anthologie d'articles majeurs dans la discipline et sélectionnés par les éditeurs – n'est pas un chapitre de livre). 2004.
25. D. Holmes, S.L. Kennedy & A. Perron. Mentally Ill and Social Exclusion: A Critical Examination of the Use of Seclusion from the Patient's Perspective. *Issues in Mental Health Nursing*, 25 (6), 559-578, 2004.
26. D. Holmes & A. Perron. Effects of patient-focused care on seclusion in a psychiatric intensive care unit. *International Journal of Therapy and Rehabilitation*, 11(11), 508, 2004.
27. L. Howson, S. Batth, V. Ilivitsky, A. Boisjoli, M. Jaworski, C. Mahoney, and V. J. Knott. Clinical and attentional effects of acute nicotine treatment in Tourette's syndrome. *Eur Psychiatry* 19 (2):102-112, 2004.
28. L. Howson, V. Ilivitsky, and V. J. Knott. Single Dose Nicotine Fails to Augment neuroleptic Treatment Response in Tourette's Disorder. *J.European Psychiatry* 2004.
29. M. A. Katzman, D. Koszycki, and J. Bradwejn. Effects of CCK-tetrapeptide in patients with social phobia and obsessive-compulsive disorder. *Depress.Anxiety* 20 (2):51-58, 2004.
30. K. A. Kiehl, A. M. Smith, A. Mendrek, B. B. Forster, R. D. Hare, and P. F. Liddle. Temporal lobe abnormalities in semantic processing by criminal psychopaths as revealed by functional magnetic resonance imaging. *Psychiatry Res* 130 (3):297-312, 2004.
31. E. Kiive, J. Maaroos, J. Shlik, I. Toru, and J. Harro. Growth hormone, cortisol and prolactin responses to physical exercise: higher prolactin response in depressed patients. *Prog Neuropsychopharmacol Biol.Psychiatry* 28 (6):1007-1013, 2004.
32. K. Koido, S. Kks, T. Nikopensus, E. Maron, S. Altme, E. Heinaste, K. Vabrit, V. Tammekivi, P. Hallast, A. Kurg, J. Shlik, V. Vasar, A. Metspalu, and E. Vasar. Polymorphisms in wolframín (WFS1) gene are possibly related to increased risk for mood disorders. *Int J Neuropsychopharmacol*:1-10, 2004.
33. V. J. Knott, M. Raegele, D. Fisher, N. Robertson, A. Millar, J. McIntosh, and V. Ilivitsky. Clonidine pre-treatment fails to block acute smoking-induced EEG arousal/mood in cigarette smokers. *Pharmacol.Biochem.Behav* 80 (1):161-171, 2005.
34. V. Knott, A. Millar, L. Dulude, L. Bradford, F. Alwahhabi, T. Lau, C. Shea, and A. Wiens. Event-related potentials in young and elderly adults during a visual spatial working memory task. *Clin EEG.Neurosci* 35 (4):185-192, 2004.

35. D. Koszycki, J. Copen, and J. Bradwejn. Sensitivity to cholecystokinin-tetrapeptide in major depression. *J Affect.Disord.* 80 (2-3):285-290, 2004.
36. D. Koszycki, S. Lafontaine, N. Frasure-Smith, R. Swenson, and F. Lesperance. An open-label trial of interpersonal psychotherapy in depressed patients with coronary disease. *Psychosomatics* 45 (4):319-324, 2004.
37. R. Langevin, S. Curnoe, P. Fedoroff, R. Bennett, M. Langevin, C. Peever, R. Pettica, S. Sandhu. Lifetime sex offender recidivism: A 25-year follow-up study. *The Canadian Journal of Criminology and Criminal Justice* 46, 531-552, 2004.
38. S. Lemonde, L. Du, D. Bakish, P. Hrdina, and P. R. Albert. Association of the C(-1019)G 5-HT1A functional promoter polymorphism with antidepressant response. *Int J Neuropsychopharmacol* 7 (4):501-506, 2004.
39. J. P. Lepine, V. Caillard, J. C. Bisseurbe, S. Troy, J. M. Hotton, and P. Boyer. A randomized, placebo-controlled trial of sertraline for prophylactic treatment of highly recurrent major depressive disorder. *Am J Psychiatry* 161 (5):836-842, 2004.
40. R. Loh E. Wilson A and Chow J. Milin. Preliminary assessment of symptoms of attention deficit disorder in adults with substance abuse disorder. *Psychiatric Services* 2004.
41. G. M. MacQueen, P. Grof, M. Alda, M. Marriott, L. T. Young, and A. Duffy. A pilot study of visual backward masking performance among affected versus unaffected offspring of parents with bipolar disorder. *Bipolar Disord.* 6 (5):374-378, 2004.
42. E. Maron, J. T. Kuikka, J. Shlik, V. Vasar, E. Vanninen, and J. Tiihonen. Reduced brain serotonin transporter binding in patients with panic disorder. *Psychiatry Res* 132 (2):173-181, 2004.
43. E. Maron, J. T. Kuikka, K. Ulst, J. Tiihonen, V. Vasar, and J. Shlik. SPECT imaging of serotonin transporter binding in patients with generalized anxiety disorder. *Eur Arch Psychiatry Clin Neurosci* 254 (6):392-396, 2004.
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46. Z. Merali, L. Du, P. Hrdina, M. Palkovits, G. Faludi, M. O. Poulter, and H. Anisman. Dysregulation in the suicide brain: mRNA expression of corticotropin-releasing hormone receptors and GABA(A) receptor subunits in frontal cortical brain region. *J Neurosci* 24 (6):1478-1485, 2004.
47. Z. Merali, L. Du, P. Hrdina, M. Palkovits, G. Faludi, M. O. Poulter, and H. Anisman. Dysregulation in the suicide brain: mRNA expression of corticotropin-releasing hormone receptors and GABA(A) receptor subunits in frontal cortical brain region. *J Neurosci* 24 (6):1478-1485, 2004.
48. Z. Merali, S. Khan, D. S. Michaud, S. A. Shippy, and H. Anisman. Does amygdaloid corticotropin-releasing hormone (CRH) mediate anxiety-like behaviors? Dissociation of anxiogenic effects and CRH release. *Eur J Neurosci* 20 (1):229-239, 2004.
49. Z. Merali, J. McIntosh, and H. Anisman. Anticipatory cues differentially provoke in vivo peptidergic and monoaminergic release at the medial prefrontal cortex. *Neuropsychopharmacology* 29 (8):1409-1418, 2004.
50. A. Messier, N. Awad, and M. Gagnon. The relationships between atherosclerosis, heart disease, type 2 diabetes and dementia. *Neurol Res* 26 (5):567-572, 2004.
51. T. W. Moody and Z. Merali. Bombesin-like peptides and associated receptors within the brain: distribution and behavioral implications. *Peptides* 25 (3):511-520, 2004.
52. A. Regehr, G.D. Glancy, and J.M. Bradford. Canadian landmark case: L.C. and the Attorney General for Alberta v. Brian Joseph Mills. *Journal of the American Academy of Psychiatry and the Law*. 28, 460-464. 2004
53. S. Renou, T. Hergueta, M. Flament, M. C. Mouren-Simeoni, and Y. Lecrubier. Diagnostic structured interviews in child and adolescent's psychiatry. *Encephale* 30 (2):122-134, 2004.
54. L. Robel, K. Ennouri, H. Piana, L. Vaivre-Douret, A. Perier, M. F. Flament, and M. C. Mouren-Simeoni. Discrimination of face identities and expressions in children with autism: same or different? *Eur Child Adolesc Psychiatry* 13 (4):227-233, 2004.
55. P. Rosa-Neto, M. Diksic, H. Okazawa, M. Leyton, N. Ghadirian, S. Mzengeza, A. Nakai, G. Debonnel, P. Blier, and C. Benkelfat. Measurement of brain regional alpha-[11C]methyl-L-tryptophan trapping as a measure of serotonin synthesis in medication-free patients with major depression. *Arch Gen Psychiatry* 61 (6):556-563, 2004.

56. A. Rothe, D. Koszycki, J. Bradwejn, N. King, Luca De, V, S. Shaikh, P. Franke, H. Garritsen, J. Fritze, J. Deckert, and J. L. Kennedy. Association study of serotonin-2A receptor gene polymorphism and panic disorder in patients from Canada and Germany. *Neurosci Lett.* 363 (3):276-279, 2004.
57. N. A. Shapira, H. E. Ward, M. Mandoki, T. K. Murphy, M. C. Yang, P. Blier, and W. K. Goodman. A double-blind, placebo-controlled trial of olanzapine addition in fluoxetine-refractory obsessive-compulsive disorder. *Biol.Psychiatry* 55 (5):553-555, 2004.
58. R. S. Shin, H. Anisman, Z. Merali, and D. C. McIntyre. Amygdala amino acid and monoamine levels in genetically Fast and Slow kindling rat strains during massed amygdala kindling: a microdialysis study. *Eur J Neurosci* 20 (1):185-194, 2004.
59. J. Shlik, E. Maron, I. Tru, A. Aluoja, and V. Vasar. Citalopram challenge in social anxiety disorder. *Int J Neuropsychopharmacol* 7 (2):177-182, 2004.
60. K. A. Smith A. M. Forster B. B and Liddle P. F. Kiehl. Neural pathways involved in the processing of concrete and abstract language. *Psychiatry Research: Neuroimaging* 2004.
61. M. Smith, P. A. Fried, M. J. Hogan, and I. Cameron. Effects of prenatal marijuana on response inhibition: an fMRI study of young adults. *Neurotoxicol. Teratol.* 26 (4):533-542, 2004.
62. M. Smith, P. Hogan M. and Cameron I. The effects of prenatal and current marijuana exposure on response inhibition: A functional magnetic resonance imaging study. *Brain and Cognition* 2004.
63. X. Sun, L. T. Young, J. F. Wang, P. Grof, G. Turecki, G. A. Rouleau, and M. Alda. Identification of lithium-regulated genes in cultured lymphoblasts of lithium responsive subjects with bipolar disorder. *Neuropsychopharmacology* 29 (4):799-804, 2004.
64. S. T. Szabo, M. S. Gold, B. A. Goldberger, and P. Blier. Effects of sustained gamma-hydroxybutyrate treatments on spontaneous and evoked firing activity of locus coeruleus norepinephrine neurons. *Biol.Psychiatry* 55 (9):934-939, 2004.
65. M. Tsiakas, M. Gagnon, N. Awad, and C. Messier. Addressing the differences in speed of processing of the intervening calculation task on the modified brown-peterson task. *Appl.Neuropsychol.* 11 (2):103-106, 2004.
66. A.Wilson. Drug withdrawal. *Diagnosis* 12(10):93-107, 2004.
67. G. Youssef, B. Plancherel, J. Laget, M. Corcos, M. F. Flament, and O. Halfon. Personality trait risk factors for attempted suicide among young women with eating disorders. *Eur Psychiatry* 19 (3):131-139, 2004.

Invited Addresses

Research Lectures (First Friday Series):

Childhood-Onset Obsessive Compulsive Disorder (OCD): Current Perspectives in Pathophysiology and Treatment

Martine F. Flament, MD, PhD, FRCPC

Research Director, Youth Program, University of Ottawa Institute of Mental Health Research

February 6, 2004

Children's Mental Health: What Makes Children Vulnerable, and What Protects Them?

Hans-Christoph Steinhausen, MD, PhD

Professor and Chairman, Department of Child and Adolescent Psychiatry
University of Zurich, Switzerland

March 5, 2004

Serotonin in Anxiety: Guilty or Innocent?

Jakov Shlik, MD, PhD, Clinical Director, Anxiety Disorders Program, ROH

April 2, 2004

Progress in the Treatment of Depression in the Last 45 Years: Fact or Fallacy?

Pierre Blier, MD, PhD, Endowed Chair, Mood Disorders Program, University of Ottawa
Institute of Mental Health Research

June 4, 2004

Factors Contributing to Treatment Resistance in Depressive Disorders

Robert P. Kraus, MD, FRCPC

Consultant Psychiatrist, Mood Disorders Program ROH

October 1, 2004

Genes Contributing to Attention-Deficit Hyperactivity Disorder and Relationship to Reading Disabilities

Cathy Lynne Barr, PhD

Senior Scientist, Toronto Western Hospital

November 5, 2004

Human Empathy: A Social Neuroscience View

Jean Decety, MA, MS, PhD

Professor and Head of the Social-Cognitive Neuroscience Institute for Learning and
Brain Sciences, University of Washington

December 3, 2004

Public Lecture

From Darkness to Light

The Lieutenant Governor of Ontario, The Hon. James K. Bartleman and
Dr. Pierre Blier, Endowed Chair, Mood Disorders Research
University of Ottawa Institute of Mental Health Research

February 20, 2004

Resident Research Day Presentations

Research Day – December 10, 2004

Oral Presentations

Dr. Brad Booth – To Sleep, Perchance to Scream: CPAP Treatment for Treatment of Obstructive Sleep Apnea and its Effect on Hostility and Aggression in Sex Offenders

Dr. Denis Lawson – Anger and Psychopathology in a Forensic Psychiatric Population

Dr. Susan J. MacNeil – Towards Informed and Effective Psychiatric Outpatient Care at the Ottawa Hospital: A Proposal for Program Evaluation in the Urgent Consultation Clinics

Dr. Veronica McCarthy – A review of Hyperparathyroidism during Maintenance Lithium Therapy

Dr. Joie Zeglinski – A Simple Screening Test for Sleep Apnea

Clinical Presentations

Dr. A.G. Ahmed – Characteristics of Patients presenting with Dysfunctional Anger

Dr. Luc J. Boulay – Brain Activity in Relation to Emotional Stimuli: An Exploratory fMRI Study in Schizophrenia Patients With and Without Prominent Auditory Hallucinations

Dr. Alan B. Douglass – Multivariate Analysis of Sleep State Misperception

Dr. Susan Farrell – High Risk Behaviour and Coping Style in Homeless Adolescent Males' and Females' Adjustment

Ms. Mona Moorhouse – Celiac Disease, Nutrition and Psychiatry

Dr. Paul Roy – Demographic Characteristics and Clinical Outcomes Among First Episode Psychosis Patients: A Prospective Study

Dr. Diana Koszycki – The Stress and Anxiety Clinical Research Unit (SACRU): Overview of Research on Risk Factors for Panic Disorder

Dr. Paul Grof – Bipolar Disorders – misdiagnosed, mistreated and mostly misunderstood entity

Academic Presentation

Dr. Patrice Boyer – The Role of the Hippocampal Formation in the Pathophysiology of Schizophrenia: New Evidences

Poster Presentations

Sex Hormones and Aggression in 100 Convicted Sex Offenders

A.G. Ahmed, MD; Curry S, BA (Hon); Fedoroff P, MD; Bradford J, MD; Dunford J, BA; Litkey J, Criminology Student

The Brockville Risk Checklist; a Pilot Project

A.G. Ahmed M.D. and K. Laprade M.A. (Forensic Program, Brockville)

Altered Layer Distribution of NR2A and NR2B Subunits in the Hippocampal CA1 Region in Mice in Which the Expression of Glycine Transporter Type 1 is Reduced

Jonathan Boyd, PhD student, marzia Martina, Ph.D., Richard Bergeron, M.D., Ph.D.

Adaptive Changes in 5-HT1A and 5-HT2 Receptors in Orbitofrontal Cortex Following Long-Term Administration with Paroxetine

Mostafa El Mansar, PhD, Pierre Blier, MD, PhD

Examining Clinical Complimentarity: A Review of CTO Patients with and without ACTT Involvement

Alison Freeland, MD, FRCPC, Anne Marie O'Brien, MSW, RSW, Susan Farrell, Ph.D., C.Psych.

E-5826, A Novel Stigma Receptor Agonist, Modulates Firing Properties in CA1 Hippocampal Pyramidal Cells

Samantha Halman, MD student, Marie-Eve Beauchemin Turcotte, MSc student, marzia Martina, Ph.D., Xavier Guitar, Ph.D., Richard Bergeron, M.D., Ph.D.

Diurnal Cortisol Changes Associated with Traumatic Experiences

Owen Kelly, Ph.D., Kathy Michaud, M.Sc, Victoria Thorne, M.Sc., Kim Matheson, Ph.D., Hymie Anisman, Ph.D.

Neurotic Introversion and Extraversion: Influence on Severity of Illness and Disability in Patients with Panic Disorder

Diana Koszycki, Ph.D., C. Psych., Ewelina Zaremba, BSc, Murray Weeks, BA, Emma Eaton, Jacques Bradwejn, M.D., FRCPC

Frequency and Correlates of Eating and Weight Disorders in Adolescents: a France-US Comparison

Michèle La Roche, PhD Candidate, Clin. Psych. University of Ottawa, Denise Baillot, MA, Paris ; Derek Auger, University of Ottawa ; Claudia Furino, BA, IMHR ; Hien Nguyen, BSc, IMHR ; Annick Buchholz, PhD, CHEO ; Gary Goldfield, PhD, CHEO ; Katherine Henderon, PhD, CHEO ; Martine Flament, MD, PhD, IMHR

From Proposal to Program : The First Two Years of a Dual Diagnosis Consultation Outreach Team in Eastern Ontario

Donna Lougheed, MD, FRCPC, Susan Farrell, Ph.D., C. Psych.

Developmental Changes in the Glutamatergic Neurotransmission of Hippocampal CA1 Pyramidal Cells in Mice with Reduced Glycine Transporter Type 1 Expression

ChunLei Ma, M.D., Marzia Martina, Ph.D., Jonathan Boyd, PhD., Richard Bergeron, M.D., Ph.D.

Victimization and Canadian Homeless Youth

Sue-Ann MacDonald, MSW, Susan Farrell, PhD, C. Psych.

Effects of Nicotine and Ketamine on Self-Reported Arousal, Mood and Physical Symptoms

Judy McIntosh, Ph.D., Anne Millar, B.Sc., Derek Fisher, B.Sc., Crystal Blais, B.A., Vadim Illivitsky, M.D., Ed Horn, M.D., Verner Knott, Ph.D., C.Psych.

Dysregulation in the Suicide Brain: mRNA Expression of Corticotropin Releasing Hormone Receptors and GABAA Receptor Subunits in Frontal Cortical Brain Regions

Zul Merali, Ph.D., Lishen Du, Ph.D., Pavel Hrdina, Ph.D., Miklos Palkovits, Ph.D., Gabor Faludi, Ph.D., Michael O. Poulter, Ph.D., Hymie Anisman, Ph.D.

Olanzapine in Children and Adolescents with Asperger's Disorder

Robert Milin, MD, Jovan Simeon, MD, Sue Bath, MD, Smita Thatte, MD

Evidence Based Primary Prevention Programs for Promoting Mental Health in Children and Adolescents: A Systematic Worldwide Review

Hien Nguyen, BSc, IMHR, Claudia Furino, BA, IMHR, Cathy Cuzner, ROH, Howard Schachter, PhD, CHEO, Martine Flament, MD, PhD, IMHR

Community Treatment Orders: Profile of a Canadian Experience (update)

Ann-Marie O'Brien, MSW, RSW, Susan Farrell, PhD., C. Psych

A Clinician Scientist Model Implementation in the ADHD Team

Philippe Robaey, MD, PhD, Sally Kuehn, PhD, C. Psych, Anne Kerridge, MSW, RSW, Catharine Robertson, MD, FRCPC, Marina Lifshin, MSc, Della McCully, SAS II, Danielle Bogan, CYC, William James, MD

Pilot Psychiatry/Endocrinology Clinic at the Royal Ottawa Hospital

Sharman Robertson, MD

Phosphorylation-Independent Desensitization of Dopamine D1 Receptors by Specific Isoforms of G Protein-Coupled Receptor Kinases

Keyvan Sedaghat, BSc, Mario Tiberi, PhD

Attitudinal Changes Regarding Mental Illness Following the Psychiatric Clerkship

Chrissoula Stavrakaki, MD, Clare Gray, MD, Alison Freeland, MD, Cathy Braidek, MD, Paula Clouther, MA

One Year Follow-Up of Inpatient Children Discharged into Day Treatment or the Community

Smita Thatte, MD, S. Kotsopoulos, MD, S. Walker, MA, H. Silva, MBBS

Combining Antidepressants to Improve Treatment Outcome in Depression

P. Tremblay, MD, H. Ward, MD, C. Hébert, RN, S. Ohara, RN, R. Bergeron, MD, PhD,
P. Blier, MD, PhD, Department of Psychiatry, University of Ottawa and University of
Florida

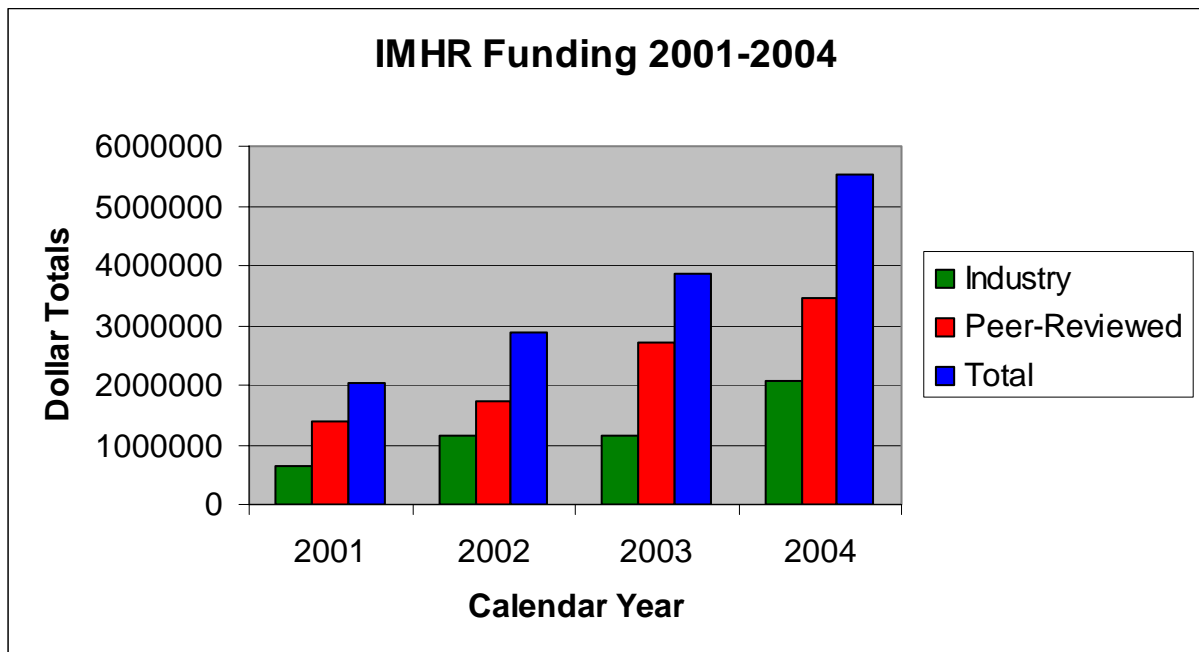
**Psychiatric Nurse Practitioner: Profile of a Unique Role to Provide Health Care
Services to the Homeless Population**

Beth Wood, RN, MScN, ACNP (Psychiatry), Susan Farrell, Ph.D., C. Psych

External Funding: Peer-Reviewed & Industry-Sponsored

The IMHR has experienced steadily increased competitive (peer-reviewed) funding over the past four years, from almost \$1.4 million dollars in 2001 to over \$3.4 million dollars in 2004, and rising. Likewise, industry-sponsored research at the IMHR has also increased substantially from approximately \$650,000 in 2001 to well over \$2.0 million dollars in 2004. On the whole, the research funding base has almost tripled in this short period (see Table and Figure, below).

	2001	2002	2003	2004
Industry	653205	1150924	1137357	2069191
Peer-Reviewed	1396908	1725955	2712408	3452540
Total	2050113	2876879	3849765	5521731



Grants and contracts awarded in 2004 include the following:

Note: CIHR: Canadian Institutes of Health Research
UMRF: University Medical Research Fund
SSHRC: Social Sciences and Humanities Research Council of Canada
NSERC: Natural Sciences and Engineering Research Council of Canada
CRC: Canadian Research Chairs
OIT: Ontario Innovation Trust
CFI: Canadian Foundation for Innovation
OMHF: Ontario Mental Health Foundation
CAMH: Centre for Addiction and Mental Health

Project Title: Behavioral and neurochemical responses to acute, subchronic, and chronic intermittent stressors in relation to depression: Moderation by genetic and early life events
PI: Anisman, H.

Co-Investigators: Merali, Z.; Poulter, M.
Funding Agency: CIHR
Funding Amount: \$695,950
Duration: 2004-09

Project Title: Identifying the facilitators and obstacles to overcoming homelessness
PI: Aubry, T.

Co-Investigators: Farrell, S.
Funding Agency: SSHRC
Funding Amount: \$100,000
Duration: 2004-06

Project Title: Treatment-resistant depression and 5HT1A receptor gene polymorphism
PI: Bisserbe, J-C

Co-Investigators: Kraus, R.; Albert, P.
Funding Agency: UMRF
Funding Amount: \$69,998
Duration: 2004-06

Project Title: Improving the treatment of major depression: The bench to the bedside approach
PI: Blier, P.

Co-Investigators: n/a
Funding Agency: Canada Research Chairs
Funding Amount: \$600,000
Duration: 2004-007

Project Title: Elucidation and optimization of the mechanisms of action of antidepressant treatments using electrophysiological recording techniques in animals and application of the results to the clinical setting

PI: Blier, P.
Co-Investigators: n/a
Funding Agency: CFI
Funding Amount: \$124,812
Duration: 2004-05

Project Title: Elucidation and optimization of the mechanisms of action of antidepressant treatments using electrophysiological recording techniques in animals and application of the results to the clinical setting

PI: Blier, P.

Co-Investigators: n/a

Funding Agency: OIT

Funding Amount: \$124,812

Duration: 2004-05

Project Title: Risperidone augmentation of SSRIs in depression: A noradrenergic action?

PI: Blier, P.

Co-Investigators: n/a

Funding Agency: Janssen Pharma

Funding Amount: \$175,500

Duration: 2004-05

Project Title: Effectiveness of the dual serotonin norepinephrine reuptake inhibitor venlafaxine in depressed patients

PI: Blier, P.

Co-Investigators: Bisserbe, J-C; Kraus, R.

Funding Agency: Wyeth Pharma

Funding Amount: \$540,401

Duration: 2004-05

Project Title: Assessment of augmentation strategies to optimize the therapeutic response to mirtazapine in major depression

PI: Blier, P.

Co-Investigators: Bergeron, R.; Bisserbe, J-C; Kraus, R.

Funding Agency: Organon Pharma

Funding Amount: \$164,600

Duration: 2004-05

Project Title: Effect of sustained administration of escitalopram on the 5-HT system in heterozygous mice for the 5-HT transporter, SCT-TX-15000

PI: Blier, P.

Co-Investigators: n/a

Funding Agency: Forest Lab, Inc

Funding Amount: \$166,251

Duration: 2004-05

Project Title: Electrophysiological exploration of the antidepressant potential of Wf-516 on the serotonin and Norepinephrine systems

PI: Blier, P.

Co-Investigators: n/a

Funding Agency: Mitsubishi Pharma

Funding Amount: \$84,375

Duration: 2004-2005

Project Title: Randomized trial on the efficacy of meditation-based stress reduction program and cognitive behavior therapy in the treatment of generalized social anxiety disorder: A pilot study.

PI: Bradwejn, J.

Co-Investigators: Koszycki, D.; Shlik, J.

Funding Agency: UMRF

Funding Amount: \$34,363

Duration: 2004-05

Project Title: REM sleep density and HPA dysregulation in bipolar disorder
PI: Douglass, A.
Co-Investigators: Grof, P.
Funding Agency: UMRF
Funding Amount: \$34,100
Duration: 2004-05

Project Title: The evolution of bipolar disorder in youths at risk: A prospective longitudinal study of the clinical course of illness and associated changes in neurocognitive functioning and gene expression among the offspring of well-characterized bipolar parents.
PI: Duffy, A.
Co-Investigators: Kutcher, S.; Grof, P.; MacQueen, G.; Alda, M.; Young, T.
Funding Agency: CIHR
Funding Amount: \$510,000
Duration: 2004-09

Project Title: A prospective study of neurocognitive functioning among adolescents at high risk for bipolar disorder
PI: Duffy, A.
Co-Investigators: Grof, P.; Milin, R.; Alda, M.; MacQueen, G.
Funding Agency: OMHF
Funding Amount: \$149,560
Duration: 2004-06

Project Title: Quetiapine maintenance treatment in early onset bipolar spectrum disorders: An open prospective longitudinal study of the effectiveness of quetiapine monotherapy in preventing relapse and minimizing neurocognitive dysfunction among adolescents manifesting bipolar spectrum disorders.
PI: Duffy, A.
Co-Investigators: Milin, R.; Grof, P.
Funding Agency: AstraZeneca
Funding Amount: \$1,039,500
Duration: 2004-07

Project Title: Validation of risk assessment tools for individuals with problematic sexual behaviour and developmental delay.
PI: 2004-07
Co-Investigators: Curry, S.; Richards, D.; Griffiths, D.; Bradford, J.
Funding Agency: CIHR
Funding Amount: \$100,000
Duration: 2004-05

Project Title: Human rights and health self-advocacy training for people who have intellectual disabilities: A multisystemic, interdisciplinary approach.
PI: Feldman, M.
Co-Investigators: Owen, F.; Griffiths, D.; Tardif, C.; Tarulli, D.; McQueen-Fuentes, G.; Sales, C.A.; Fedoroff, P.
Funding Agency: CIHR
Funding Amount: \$292,216
Duration: 2004-07

Project Title: Correlates of eating and weight disorders in a community-based adolescent population: Investigating an integrative biopsychosocial model.
PI: Flament, M.
Co-Investigators: Henderson, K.A.; Buchholz, A.; Goldfield, G.
Funding Agency: UMRF
Funding Amount: \$34,777
Duration: 2004-05

Project Title: A multicentre, randomized controlled trial of negative ion generation versus light-emitting diode phototherapy for seasonal affective disorder.
PI: Horn, E.
Co-Investigators: Knott, V.; Telner, J.; Moorhouse, M.; Bhatla, R.
Funding Agency: Litebook Co
Funding Amount: \$83,687
Duration: 2004-05

Project Title: Children at risk for panic disorder
PI: Koszycki, D.
Co-Investigators: Bradwejn, J.; Flament, M.
Funding Agency: UMRF
Funding Amount: \$33,793
Duration: 2004-05

Project Title: Children at risk for panic disorder
PI: Koszycki, D.
Co-Investigators: Bradwejn, J.; Flament, M.
Funding Agency: CIHR
Funding Amount: \$214,509
Duration: 2004-07

Project Title: An open-label study of the efficacy and safety of Risperdal long-acting microspheres (Risperdal Consta™) administered once monthly in adults with schizophrenia or schizoaffective disorder. (extension phase)
PI: Labelle, A.
Co-Investigators: Bourget, D.; Habib, R.; Tessier, P.
Funding Agency: Janssen-Ortho
Funding Amount: \$52,000
Duration: 2004-06

Project Title: Father-adolescent interactional patterns associated with adolescent depression: An examination of attachment and communication within the dyad.
PI: Manion, I.
Co-Investigators: Demidenko, N.; Lee, C.; Duffy, A.
Funding Agency: OMHF
Funding Amount: \$138,220
Duration: 2004-06

Project Title: The cumulative impacts of everyday discrimination: Compromised neuroendocrine functioning and vulnerability to stress-related psychopathology
PI: Matheson, K.
Co-Investigators: Anisman, H.; Foster, M.
Funding Agency: CIHR
Funding Amount: \$325,542
Duration: 2004-07

Project Title: Peptidergic mediation/modulation of stress response
PI: Merali, Z.
Co-Investigators: n/a
Funding Agency: NSERC
Funding Amount: \$355,250
Duration: 2004-09

Project Title: Motivational enhancement and substance abuse prevention: Evaluating the First Contact-Revised Program for co-morbid youth.
PI: Milin, R.
Co-Investigators: Skilling, T.; Wekerle, C.; Goldstein, A.
Funding Agency: UMRF
Funding Amount: \$23,250
Duration: 2004-05

Project Title: Junior Faculty Research Award
PI: Milin, R.
Co-Investigators: n/a
Funding Agency: UMRF
Funding Amount: \$30,000
Duration: 2004-06

Project Title: L'évaluation des préférences sexuelles à l'aide de la vidéo-oculographie en immersion virtuelle auprès d'un échantillon de sujets agresseurs sexuels d'enfants et d'adolescents.
PI: Renaud, P.
Co-Investigators: Proulx, J.; Rouleau, J.; Bradford, J.; Fedoroff, P.
Funding Agency: CIHR
Funding Amount: \$250,623
Duration: 2004-08

Project Title: Clinical and biogenetic characteristics of treatment response to SSRIs in patients with anxiety disorders
PI: Shlik, J.
Co-Investigators: Koszycki, D.; Du, L.; Hrdina, P.; Albert, P.; Bradwejn, J.
Funding Agency: UMRF
Funding Amount: \$29,990
Duration: 2004-05

Project Title: Clinical and biogenetic characteristics of treatment response to SSRIs in patients with anxiety disorders
PI: Skilling, T.
Co-Investigators: Milin, R.; Wekerle, C.; Goldstein, A.
Funding Agency: CAMH
Funding Amount: \$15,000
Duration: 2004-06

Awards

The IMHR is very pleased that Dr. Pierre Blier, Director of the Mood Disorders Research Unit, was the recipient of a Tier 1 Canadian Research Chair, in 2004. He is one of a handful of researchers to hold this prestigious award in the field of Mental Health Research. The Canada Research Chairs Program stands at the centre of a national strategy to make Canada one of the world's top five countries for research and development. **Tier 1 Chairs**, tenable for seven years and renewable, are for outstanding researchers acknowledged by their peers as world leaders in their fields.

Chair-holders advance the frontiers of knowledge in their fields, not only through their own work, but also by teaching and supervising students and coordinating the work of other researchers. By helping Canadian universities and their affiliated research institutes and hospitals become world-class centers of research and research training, the Chairs Program contributes to enhancing Canada's competitiveness in the global, knowledge-based economy, improving Canadians' health, and enriching our social and cultural life.

The Chairs Program also seeks to strengthen research excellence in Canada and increase Canada's research capacity by attracting and retaining the best researchers; improve the training of highly qualified personnel through research; improve universities' capacity to generate and apply new knowledge; promote the best possible use of research resources through strategic institutional planning, and through collaboration among institutions and between sectors.

Dr. Blier was also awarded a prestigious Canadian Foundation for Innovation (CFI) grant for the establishment of his laboratory. This funding was in the amount of \$124,812, and was matched by a similar grant from the Ontario Innovation Trust (OIT) for total funding of \$249,624.