

CURRICULUM VITAE

Benicio N. Frey, M.D., M.Sc., Ph.D.

BUSINESS ADDRESS:

Mood Disorders Program and Women's Health Concerns Clinic
St. Joseph's Healthcare Hamilton
McMaster University
100 West 5th St., Suite C124
Hamilton, ON L8N3K7 - Canada
Phone: +1 (905) 522-1155, ext. 33605
Email: freybn@mcmaster.ca

A. EDUCATION

- 2008-2009 Postdoctoral/Clinical Fellow, Women's Health Concerns Clinic, Department of Psychiatry and Behavioural Neurosciences, McMaster University, Hamilton, ON, Canada.
- 2006-2007 Postdoctoral Fellow, McConnell Brain Imaging Centre, Montreal Neurological Institute, McGill University, Montreal, QC, Canada.
- 2005-2006 Research Fellow, Department of Psychiatry, The University of Texas Health Science Center at San Antonio, San Antonio, TX, USA.
- 2004-2006 Doctorate (Ph.D. in Biochemistry), Department of Biochemistry, Universidade Federal do Rio Grande do Sul, Porto Alegre, RS, Brazil.
- 2002-2004 Master of Science (M.Sc. in Biochemistry), Department of Biochemistry, Universidade Federal do Rio Grande do Sul, Porto Alegre, RS, Brazil.
- 2002 Resident, Psychopharmacology and Psychotherapy Track, Department of Psychiatry, Universidade Federal do Rio Grande do Sul, Porto Alegre, RS, Brazil.
- 2000-2001 Resident, Department of Psychiatry, Fundação Faculdade Federal de Ciências Médicas de Porto Alegre, Porto Alegre, RS, Brazil.
- 1994-1999 Physician (M.D.), Fundação Faculdade Federal de Ciências Médicas de Porto Alegre, Porto Alegre, Brazil.

B. EMPLOYMENT (academic and non-academic)

- 2013 – present Associate Professor, Department of Psychiatry and Behavioural Neurosciences, McMaster University (*primary affiliation*)
- 2012 - present Academic Head, Mood Disorders Program, Department of Psychiatry and Behavioural Neurosciences, McMaster University

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2012 - present	Medical Director, Women's Health Concerns Clinic, St. Joseph's Healthcare Hamilton, Canada
2012 - 2014	Associate Director, Neuroscience Graduate Program, McMaster University
2009 – present	Staff Psychiatrist, Women's Health Concerns Clinic and Mood Disorders Program, St. Joseph's Healthcare Hamilton
2009 – 2013	Assistant Professor, Department of Psychiatry and Behavioural Neurosciences, McMaster University
2008 – 2009	Postdoctoral Clinical Fellow, Women's Health Concerns Clinic, Department of Psychiatry and Behavioural Neurosciences, McMaster University
2007 – 2008	Postdoctoral Fellow, Department of Neurology and Neurosurgery, McGill University
2004 - 2005	Chief, Electroconvulsive Therapy Service, Mae de Deus Hospital, Porto Alegre, RS, Brazil
2004-2005	Medical Staff, Mood Disorders Inpatient Unit, Mae de Deus Hospital, Porto Alegre, RS, Brazil
2003-2005	Research Supervisor, Bipolar Disorders Program, Federal University of Rio Grande do Sul, Brazil

C. PRIZES, AWARDS, RECOGNITIONS

2020-24	University Scholar, Master University
2020	Graduate Mentorship Award, Department of Psychiatry and Behavioural Neurosciences, McMaster University
2016	Highly Cited Research, Elsevier (One of the 5 top cited articles of European Psychiatry journal between 2014-2015)
2014-16	Independent Investigator Award, Brain and Behavior Foundation (NARSAD)
2014-16	Early Research Award, Ministry of Research and Innovation of Ontario
2012	Poster Prize Winner, "Cortical thickness in Single and Multiple Episodes of Depression in Midlife Women", North American Menopause Society
2011	Top Cited Article, Elsevier (One of the 5 top cited articles of Neuroscience Letters journal between 2006-2010)

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2010	CINP Rafaelsen Young Investigators Award, International College of Neuro-Psychopharmacology
2009	Young Investigator Travel Award, North American Menopause Society
2009	W.G. Dewhurst Travel Award, Canadian College of Neuropsychopharmacology
2008-09	Father Sean O'Sullivan Postdoctoral Fellowship Award, St. Joseph's Healthcare Hamilton
2008-09	CIHR/Rx&D Fellowship Award, Canadian Institutes of Health Research
2007	Research Colloquium for Junior Investigators, American Psychiatric Association
2006	Samuel Gershon Junior Investigator Awards, International Society for Bipolar Disorders
2005-06	Research Fellowship Award, CAPES Foundation, Ministry of Education of Brazil
2003	Young Psychiatrist Award, Brazilian Psychiatric Association

D. SELECTED PUBLICATIONS (out of a total of 194 publications; *denotes Dr. Frey's students)

1. **Frey BN**, Vigod S, Cardoso TA, *Librenza D, Kapczinski F. The early burden of disability in individuals with mood and common mental disorders in Ontario, Canada. *JAMA Netw Open* Oct 1;3(10):e2020213
2. *Caropreso L, *Saliba S, *Hasegawa L, Lawrence J, Davey C, **Frey BN**. Quality assurance assessment of a specialized perinatal mental health clinic. *BMC Pregnancy Childbirth* 2020 Aug 24;20(1):485
3. Murray G, Gottlieb J, Hidalgo MP, Etain B, Ritter P, Skene DJ, Garbaza C, Bullock B, Merikangas K, Zipunnikov V, Shou H, Gonzalez R, Scott J, Geoffroy PA, **Frey BN**. Measuring circadian function in bipolar disorders: Empirical and conceptual review of physiological, actigraphic, and self-report approaches. *Bipolar Disord* 2020 Nov;22(7):693-710
4. Swainson J, McGirr A, Blier P, Brietzke E, Richard-Devantoy S, Ravindran N, Blier J, Beaulieu S, **Frey BN**, et al. The Canadian Network for Mood and Anxiety Treatments (CANMAT) Task Force Recommendations for the Use of Racemic Ketamine in Adults with Major Depressive Disorder. *Can J Psychiatry* 2020 (In press)
5. *Bogie BJM, Kapczinski FP, McCabe RE, McKinnon MC, **Frey BN**. Emotional reactivity and explicit emotional memory biases in major depressive disorder during euthymia. *Psychiatry Res* 2020 (in press)
6. *Caropreso L, Azevedo Cardoso T, *Eltayebani M, **Frey BN**. Preeclampsia as a risk factor for postpartum depression and psychosis: A systematic review and meta-analysis. *Arch Womens Ment Health* 2020 Aug;23(4):493-505

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7. Green SM, Donegan E, McCabe RE, Fedorkow DM, Streiner DL, **Frey BN**. Objective and subjective vasomotor symptom outcomes in the CBT-Meno randomized controlled trial. *Climacteric* 2020 Oct;23(5):482-488
8. *Suh JS, Minuzzi L, Raamana PR, Davis A, Hall GB, Harris J, Hassel S, Zamyadi M, Arnott S, Alders GL, Sassi RB, Milev R, Lam RW, MacQueen GM, Strother SC, Kennedy SH, **Frey BN**. An investigation of cortical thickness and antidepressant response in major depressive disorder: a CAN-BIND study report. *Neuroimage Clin* 2020;25:102178
9. Dunlop K, Rizvi SJ, Kennedy SH, Hassel S, Strother SC, Harris JK, Zamyadi M, Arnott SR, Davis AD, Mansouri F, Schulze L, Ceniti AK, Lam RW, Milev R, Rotzinger S, Foster JA, **Frey BN**, et al. Clinical, behavioral, and neural measures of reward processing correlate with escitalopram response in depression: a Canadian Biomarker Integration Network in Depression (CAN-BIND-1) Report. *Neuropsychopharmacology* 2020;45(8):1390-1397
10. Green S, Donegan E, McCabe R, Streiner D, Agako A, **Frey BN**. Cognitive behavioral therapy for perinatal anxiety: A randomized controlled trial. *Aust N Z J Psychiatry* 2020;54(4):423-432
11. Zhdanov A, Atluri S, Wong W, Vaghei Y, Daskalakis ZJ, Blumberger DM, **Frey BN**, et al. Use of machine learning for predicting escitalopram treatment outcome from electroencephalography recordings in adult patients with depression. *JAMA Netw Open* 2020;3(1): e1918377
12. Uher R, **Frey BN**, Quilty LC, Rotzinger S, Blier P, Foster JA, et al. Symptom dimension of interest activity indicates need for aripiprazole augmentation of escitalopram in major depressive disorder: A CANBIND-1 Report. *J Clin Psychiatry* 2020;81(4):20m13229
13. *Slyepchenko A, *Allega OR, Xiamin L, Minuzzi L, Eltayebani M, *Skelly M, Sassi R, Soares C, Kennedy SH, **Frey BN**. Association of functioning and quality of life with objective and subjective measures of sleep and biological rhythms in major depressive and bipolar disorder. *Aust N Z J Psychiatry* 2019;53(7):683-696
14. *Sehmbi M, Rowley CD, Minuzzi L, Kapczynski F, Kwiecien JM, Bock NA, **Frey BN**. Age-related deficits in intracortical myelination in young adults with bipolar disorder type 1. *J Psychiatry Neurosci* 2019;44(2):79-88
15. *Syan SK, Minuzzi L, *Smith M, Costescu D, *Allega OR, Hall GBC, **Frey BN**. Brain structure and function in women with co-morbid bipolar and premenstrual dysphoric disorder. *Front Psychiatry* 2018;8:301
16. Lopez JP, Fiori LM, Cruceanu C, Lin R, Labonte B, Cates HM, Heller EA, Vialou V, Ku SM, Gerald C, Han MH, Foster J, **Frey BN**, et al. MicroRNAs 146a/b-5 and 425-3p and 24-3p are markers of antidepressant response and regulate MAPK/Wnt-system genes. *Nat Commun* 2017;8:15497

E. CURRENT RESEARCH FUNDING

2018/7 - 2023/6 *Canadian Biomarker Integration Network for Depression (CAN-BIND) Integrated Discovery (ID) Program, Team Grant, Operating*
Funding Source: Ontario Brain Institute
Total Funding: 10,500,000 (Canadian dollar)
Role: Co-investigator and site-PI
Principal Investigator: Dr. Sidney Kennedy

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- 2021/1 - 2022/12 A pilot, double-blind, randomized controlled trial evaluating treatment of premenstrual dysphoric disorder comorbid with bipolar disorder using adjunctive oral contraceptives, Project Grant, Operating Funding Source: Hamilton Academic Health Sciences Organization
Total Funding: 181,540 (Canadian dollar)
Role: Principal Investigator
- 2020/12 - 2022/12 *A Gender- and Age-Based Analysis of Cannabis Use for Pain and Mental Health in a Large Canadian Naturalistic Sample, Project Grant*
Funding source: Canadian Centre On Substance Abuse
Total Funding: 71,875 (Canadian dollar)
Role: Principal Investigator
- 2019/7 - 2022/6 *Examining the psychometric properties of an open-access diagnostic interview for researchers and clinicians: The Diagnostic Assessment Research Tool (DART) for DSM-5, Project Grant, Operating*
Funding Source: Canadian Institutes of Health Research (CIHR)
Total Funding: 726,398 (Canadian dollar)
Role: Co-investigator
Principal Investigator: Dr. Randi McCabe
- 2016/7 - 2021/6 *The Longitudinal Course of Intracortical Myelination and Cognitive Function in Bipolar, Project Grant, Operating*
Funding source: Canadian Institutes of Health Research (CIHR)
Total Funding: 925,044 (Canadian dollar)
Role: Principal Investigator
- 2018/6 - 2021/5 *Intracortical Myelin as a Mechanism for Sex Differences in Major Depressive Disorder, Catalyst Grant*
Funding source: Canadian Institutes of Health Research (CIHR)
Total Funding: 137,810 (Canadian dollar)
Role: Principal Investigator
- 2020/5 - 2021/5 *Utilization of an Existing Longitudinal Observational Cohort of Community Adults to Characterize the Mental Health and Substance Use Impacts of COVID-19, Operating Grant*
Funding source: COVID-19 Rapid Research Funding Opportunity, Canadian Institutes of Health Research (CIHR)
Total Funding: 491,264 (Canadian dollar)
Role: Co-investigator
Principal Investigators: Dr. James MacKillop
- 2019/3 - 2021/2 *A proof-of-concept, double-blind, randomized, placebo-controlled trial evaluating the efficacy and safety of cannabis-infused MCT oil for treatment of insomnia in major depression, Catalyst Grant*
Funding source: Canadian Institutes of Health Research (CIHR)
Total Funding: 124,230 (Canadian dollar)
Role: Principal Investigator