MARY C. OLMSTEAD
CURRICULUM VITA

Affiliation and Contact
Professor
Dept. of Psychology
Centre for Neuroscience Studies
Queen's University
Kingston, ON Canada K7L 3N6
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EDUCATION

B.Sc.	Music/Psychology	University of Toronto	1989
M.Sc.	Psychology	McGill University	1991
Ph.D.	Psychology	McGill University	1995

PROFESSIONAL EXPERIENCE

Chercheuse Invitée 2017-2018
Laboratoire de Neuroscience Cognitives et Adaptives (LNCA)
Université de Strasbourg
Strasbourg, France

Professor 2012-present
Department Psychology, Biomedical and Molecular Sciences
Queen's University
Kingston, Canada

Visiting Scientist 2011-2012
Centre d'Écologie Fonctionnelle Évolutive (CEFE)
Centre Nationale de al Recherche Scientifique (CNRS)
Montpellier, France

Visiting Scientist 2006-2007
Institut de Génétique et de Biologie Moléculaire et Cellulaire
Strasbourg, France

Associate Professor 2004-2012
Department of Psychology, Pharmacology & Toxicology
Queen's University

Assistant Professor 1998-2004
Department of Psychology, Queen's University

Senior Research Associate 1997
Department of Experimental Psychology, University of Cambridge
Cambridge, UK

Post Doctoral Fellow 1995-1997
Department of Experimental Psychology, University of Cambridge
Cambridge, UK

Post Doctoral Fellow 1995
Centre for Studies in Behavioural Neurobiology, Concordia University
Montreal, Canada

AWARDS AND FELLOWSHIPS

Agency	Tenure
Natural Sciences and Engineering Research Council of Canada Discovery Accelerator Supplement Award	2012-2015
Visiting Scholar's Program Faculty of Arts and Science, Queen's University	2009
Medical Research Council of Canada Research Fellowship	1997
Human Frontier Science Program Organization Long-Term Fellowship	1995-1997
Natural Sciences and Engineering Research Council of Canada Post Doctoral Fellowship	1995
Fonds pour la formation de Chercheurs et L'Aide à la Recherche du Québec Post Doctoral Fellowship (not accepted)	1995
Fonds pour la formation de Chercheurs et L'Aide à la Recherche du Québec Post Graduate Scholarship	1993-1994
Natural Sciences and Engineering Research Council of Canada Post Graduate Scholarship	1991-1993
Natural Sciences and Engineering Research Council of Canada Undergraduate Summer Research Fellowship	1989
St. Michael's College, University of Toronto Undergraduate Academic Scholarships	1986-1989
University of Toronto Undergraduate Admissions Scholarship	1984

RESEARCH FUNDING

Agency	Tenure
Principle Investigator	
Natural Sciences and Engineering Research Council Discovery Grant Immune-reward interactions: Contributions of the endocannabinoid system 55 000 per annum	2020-2025
Experiential Learning Fund, Queen's University Research and Information Science Education (RISE) 4 000 Co-application: C. Soutar	2018-2019
Projet Internationaux de Coopération Scientifique (PICS) Addiction à la nourriture palatable et épigénétique: Neuroadaptations communes aux drogues? 21 000 E Co-applicant: K. Befort	2017-2020
Canadian Institutes of Health Research Operating Grant Investigating how gliosis modifies opioid analgesia and reward $147,420 per annum	2012-2018

Co-applicant: C.M. Cahill

Natural Sciences and Engineering Research Council of Canada 2012-2018
Discovery Grant
Interactions between impulsivity and reward: relevance to addiction
$65,000 per annum

Natural Sciences and Engineering Research Council of Canada 2006-2012
Discovery Grant
The role of impulsivity in the development and maintenance of drug addiction
$37,620 per annum

Natural Sciences and Engineering Research Council 2009-2010
Research Tools and Instruments
Electrophysiological workstation to study cellular and molecular bases of behaviour
$56,000
Co-applicant: Eric Dumont and Richard Beninger

Visiting Scholar's Program 2009
Faculty of Arts and Science, Queen's University
$2,977

France-Canada Research Foundation 2008-2009
Role of opioid receptors in impulsivity
23,000 E

Natural Sciences and Engineering Research Council 2006-2007
Research Tools and Instruments
Rodent Operant Test Chambers
$55,343
Co-applicants: R.J. Beninger, J.L. Menard, H.C. Dringenberg

Natural Sciences and Engineering Research Council of Canada 2006-2011
Discovery Grant
The role of impulsivity in the development and maintenance of drug addiction
$37,620 per annum

Canadian Institutes of Health Research 2006-2009
Proof of Principle Grant, Phase 1
Cannabinoid Combinations: Novel Products for Pain Relief
$123,648
Co-applicant: J.J. Paquette
Commercialization Partner: PARTEQ Innovations

Ontario Problem Gambling Research Centre 2006-2007
Level 1 Research Grant
Effects of Psychosocial Stress on Risk-Taking in Intoxicated Individuals
$10,515

Natural Sciences and Engineering Research Council of Canada 2002-2006
Discovery Grant
The role of impulsivity in the development and maintenance of drug addiction
$32,000 per annum

Advisory Research Committee, Queen's University 2000-2001
Principal's Development Fund Award

Alcohol intoxication and impulsivity
$7,930
Co-applicant: T.K. MacDonald

Advisory Research Committee, Queen's University 1999-2000
Principal's Development Fund Award
Effects of early environmental experience on the neural changes associated with aging and drug addiction
$9,888
Co-applicant: H.C. Dringenberg

Natural Sciences and Engineering Research Council of Canada 1998-2002
Operating Grant
Neural and psychological mechanisms underlying the progression of drug addiction
$23,100 per annum

Natural Sciences and Engineering Research Council of Canada 1998
Equipment Grant
Neural and psychological mechanisms underlying the progression of drug addiction
$16,452

Advisory Research Committee, Queen's University 1998-1999
Principal's Development Fund Award
Establishing animal behavioural paradigms of drug addiction
$9,371

Co-Applicant

Institute pour la Recherche en Santé Publique (IReSP) 2021-2024
Consommation excessive de sucre: facteur de risqué pour l'abuse d'alcool?
99 840 E (~75,000 Can$ per annum)
Principle Investigator: Katia Befort
Co-applicant: M.C. Olmstead

Foundation Pour la Recherche en Alcoologie 2018-2020
Consommation excessive de sucre: facteur de risqué pour l'abuse d'alcool?
8 000 E
Principle Investigator: Katia Befort
Co-applicant: M.C. Olmstead

Natural Sciences and Engineering Research Council of Canada 2017-2018
Research Tools and Instruments
Locomotor activity monitor for rats
42 545
Principle Investigator: Richard J. Beninger
Co-applicants: J.L. Menard M.C. Olmstead, H.C. Dringenberg

Natural Sciences and Engineering Research Council of Canada 2016-2017
Research Tools and Instruments
Western Blot workstation for investigating the molecular basis of behaviour
60 162
Principle Investigator: Janet L. Menard
Co-applicants: M.C. Olmstead, R.J. Beninger, H.C. Dringenberg

Natural Sciences and Engineering Research Council 2010-2011
Research Tools and Instruments
Cage Washer
$ 150,000
Principal Investigator: Richard J. Beninger
Co-applicants: J.L. Menard, H.C. Dringenberg, N. Troje, B. Frost

Canadian Institutes of Health Research 2007-2010
Operating Grant
Chronic prenatal ethanol exposure changes the pharmacological response to acute ethanol and nicotine administration in postnatal life
$107,802 per annum
Principle Investigator: J.N. Reynolds

Natural Sciences and Engineering Research Council 2004-2005
Research Tools and Instruments
Rodent housing infrastructure
$10,000
Principle Investigator: H.C. Dringenberg

Advisory Research Committee, Queen's University 2003-2004
Principal's Development Fund Award
The effect of early adversity on adult depression: An animal model
$4,000
Principle Investigator: K.L. Harkness

Canadian Foundation for Innovation 1998
New Opportunities Award
Creation of a multi-disciplinary behavioural neuroscience laboratory: Emphasis on neuropathology associated with aging and drug addiction
$70,000
Principle Investigator: H.C. Dringenberg

Ontario Research and Development Fund 1999
Creation of a multi-disciplinary behavioural neuroscience laboratory: Emphasis on neuropathology associated with aging and drug addiction
Infrastructure for behavioural neuroscience laboratory
$46,200
Principle Investigator: H.C. Dringenberg

RESEARCH CONTRACTS

Organization **Tenure**

Pearson Canada 2021
Test bank development: *Drugs, Behavior, and Modern Society*
$5,000

Pain Therapeutics Pain Therapeutics Inc. (San Francisco, CA)
2005
Preclinical assessment of novel oxycodone compounds
$4,544

EchoTrack Inc. (Ottawa, ON) 2005

Flight pattern assessments of foraging bats
$3,000

Pain Therapeutics Inc. (San Francisco, CA) 2003
Rewarding and aversive effects of opioid agonist-antagonist combinations
$14,985

Pain Therapeutics Inc. (San Francisco, CA) 2002
Microdialysis of accumbens dopamine in rats following acute administration and withdrawal from morphine vs. morphine/ naltrexone combinations
$18,696

Vancouver International Airport Authority and Transport Canada (Ottawa, ON) 2000-2002
Assessment of a conditioning and suppression unit for bird control
$4,500

Canadian Bird Suppression Technologies (Vancouver, BC) 1999
Experimental assessment of avoidance learning in birds
$2,000

CONSULTING CONTRACTS

Organization **Dates**

Options for Change (Kingston, ON) 2004-2005
Development of outcome assessment tools

Pain Therapeutics Inc. (San Francisco, CA) 2002-2005
Evaluating abuse potential of novel analgesics

Ocean Nutrition (Halifax, NS) 2003
Relationship between neural deficits and attention deficit hyperactivity disorder

Ontario Substance Abuse Bureau (Toronto, ON) 2002
Assessment of program restructuring and job descriptions for Ontario service agencies

Options for Change (Kingston, ON) 2002
Validation of Intake Assessment Tool to identify client preparedness for group therapy

Canadian Bird Suppression Technologies (CBST), Vancouver BC 2001
Data analysis from field trial of aversive learning in birds

Options for Change (Kingston, ON) 2000-2001
Development of intake assessment tool

Alcohol and Drug Referral Centre (Kingston, ON) 1999
Program restructuring for addiction services

PUBLICATIONS

Books

Olmstead, M.C., & Kuhlmeier, V.A. (2016). *Comparative Cognition*. Cambridge UK: Cambridge University Press.

Referred Journal Articles

Blumberg, M.J., Lo, L.A., Harrison, G.W., & **Olmstead, M.C.** (2023). Differential impacts of perceived social support on alcohol and cannabis use in emerging adults: Lessons from the COVID-19 pandemic. University of Toronto Medical Journal, 100(1), 28-39.

Lamontagne, S.J., Wash, S., Irwin, S.H., Zucconi, K.E., & **Olmstead, M.C.** (2022). Effects of dopamine modulation on chronic stress-induced deficits in reward learning. Cognitive, Affective, and Behavioral Neuroscience, 22(4), 736-753.

De Sa Nogueira, D., Boudry, R., Alcala-Vida, R., Filliol, D., Andry, V., Goumon, Y., Zwiller, J., Romieu, P., Merienne, K., **Olmstead, M.C.**, & Befort, K. (2022). Hippocampal cannabinoid 1 receptors are modulated following cocaine self-administration in rats. Molecular Neurobiology, 59(3), 1896-1911

Lamontagne, S.J., Winters, M.F., Pizzagalli, D.A., & **Olmstead, M.C.** (2021). Post-acute sequelae of COVID-19: Evidence of mood and cognitive impairment. Brain, Behavior, and Immunity – Health, 17:100347.

Soutar, C.N., Grenier, P., Patel, A., Kabitsis, P., **Olmstead, M.C.**, Bailey, C.D.C. & Dringenberg, H.C. (2021). Brain-generated 17β-estradiol modulates long-term synaptic plasticity in the primary auditory cortex of adult male rats. Cerebral Cortex, Oct 9:bhab345.

Bourdy, R., Hertz, A., Filliol, D., Andry, V., Goumon, Y., Mendoza, J., **Olmstead**, **M.C.**, & Befort, K. (2021). The endocannabinoid system is modulated in reward and homeostatic brain regions following diet-induced obesity in rats: A cluster analysis approach. European Journal of Nutrition, 60(8), 4621-4633.

De Sa Nogueira, D., Bourdy, R., Fillioil, D., Awad, G., Andry, V., Goumon, Y., **Olmstead, M.C.**, & Befort, K. (2021). Binge sucrose-induced neuroadaptations: A focus on the endocannabinoid system. Appetite, 164, 105258.

Grenier, P., Sunavksy, A., & **Olmstead, M.C.** (2021). Morphine induces upregulation of neuronally-expressed CB2 receptors in the spinal dorsal horn of rats. Cannabis and Cannabinoid Research*,* 16(2), 137-147.

Lamontagne, S.J., Wilkin, M.M., Menard, J.L., & **Olmstead, M.C.** (2021). Mid-adolescent stress differentially affects sucrose bingeing across estrous cycles in female rats. Physiology and Behavior*,* 228, 113194

Lamontagne, S.J., Pizzagalli, D., & **Olmstead, M.C.** (2020). Does inflammation link stress to poor COVID-19 outcomes? Stress and Health, 37(3), 401-414.

Kuhlmeier, V.A., Karasewich, T.A., & **Olmstead, M.C.** (2020). Teaching animal learning and cognition: adapting to the online environment. Comparative Cognition and Behavior Reviews, 15, 187-198.

Jian, P., Stewart, T.C., & **Olmstead, M.C.** (2020). Implementing incentive sensitization theory of addiction with NENGO neural simulator. International Conference on Cognitive Modeling*,* page 115-121.

Cahill, C.M., Holdridge, S.V., Liu, S., Xue, L., Magnussen, C., Ong, E., Grenier, P., Sutherland, A., & **Olmstead, M.C.** (2020). Delta opioid receptor activation modulates affective pain and modality-specific pain hypersensitivity associated with chronic neuropathic pain. Journal of Neuroscience Research (July 5 2020) doi: 10.1002/jnr.24680

Lamontagne, S.J., Kuhlmeier, V.A., & **Olmstead, M.C.** (2020). Comparative cognition and cognitive ecology in the classroom. Canadian Journal of Experimental Psychology*,* 74(3), 176-182.

Correia, C., Romieu, P., **Olmstead, M.C.**, & Befort, K. (2020). Can cocaine-induced neuroinflammation explain maladaptive cocaine-associated memories? Neuroscience and Biobehavioral Reviews*,* 111, 69-83.

Awad, G., Roeckel, L.A., Massotte, D., **Olmstead, M.C.**, & Befort, K. (2020). Deletion of mu opioid receptors reduces palatable solution intake in a mouse model of binge eating. Behavioural Pharmacology, 31, 249-255.

Grenier, P., Maihiot, M.C., Cahill, C.M., & **Olmstead, M.C.** (2020). Blockade of dopamine D1 receptors disrupts morphine reward in pain naïve but not chronic pain states. Journal of Neuroscience Research (Nov. 12 2020) doi: 10.1002/jnr.24553.

*special issue on opioids and pain

Liu, S., Pickens, S., Taylor, A.M., Yang, H., Xue, L., Williams, P., Cook, C. Burma, N., Hakimian, J.K., Saverino, A., Ibarra, I., Lueptow, L., Carroll, F.I., Andrews, A.M., **Olmstead, M.C.**, Walwyn, W., Trang, T., Evans, C.J., Leslie, F. & Cahill, C.M. (2019). Kappa opioid receptors drive the tonic aversive component of chronic pain. Journal of Neuroscience, 39, 4162-4178.

Lamontagne, S.J. & **Olmstead, M.C.** (2019). Animal models in addiction research: A dimensional approach. Neuroscience and Biobehavioural Reviews, 106, 91-101.

*invited review

*Special issue on Addiction: A neurobiological and cognitive brain disorder

Maracle, A.C., Normandeau, C.P., Dumont, E.C., & **Olmstead, M.C.** (2019). Dopamine in the bed nucleus of the stria terminals contributes to compulsive responding for sucrose in rats. Neuropsychopharmacology, 44, 381-389. *F1000

Roeckel, L.A., Massotte, D., **Olmstead, M.C.**, & Befort, K. (2018). CB1 agonism alters addiction-related behaviours in mice lacking mu or delta opioid receptors. Frontiers in Psychiatry, 9, 630.

Lamontagne, S.J., Melendez, S.I., & **Olmstead, M.C.** (2018). Investigating dopamine and glucocorticoid systems as underlying mechanisms of anhedonia. Psychopharmacology, 235, 3103-3113.

Smail-Crevier, R.L., Maracle, A.C., Wash, S.I., & **Olmstead, M.C.** (2018). Binge-like intake of sucrose reduces the rewarding value of sucrose in adult rats. Physiology and Behavior, 194, 420-429.

Lamontagne, S.J. & **Olmstead, M.C.** (2018). Animal models in addiction research: A dimensional approach. Neuroscience and Biobehavioural Reviews, Oct. 8 Epub.

Grenier, P., Wiercigroch, D., **Olmstead, M.C.,** & Cahill, C.M. (2018). Dissociation between morphine-induced spinal gliosis and analgesic tolerance by ultralow dose α2-adrenergic and cannabinoid CB1 receptor antagonists. Behavioural Pharmacology, 29, 241-254. *Special issue on pain research

Mahoney, M.K., Barnes, J.H., Wiercigroch, D., & **Olmstead, M.C.** (2016). Pharmacological investigations of a yohimbine-impulsivity interaction in rats. Behavioural Pharmacology, 27, 585-595.

Lamontange, S.J., **Olmstead, M.C.**, & Menard, J.L. (2016). The lateral septum and anterior hypothalamus act in tandem to regulate burying in the shcok-probe test but not open-arm avoidance in the elevated plus-maze. Behavioural Brain Research, 314, 16-20.

Kuhlmeier, V.K., & **Olmstead, M.C.** (2016). Keep calm and Comp. Cog. On Commentary: A crisis in comparative psychology: Where have all the undergraduates gone? Frontiers in Psychology, 7, 20.

Taylor, A.M.W., Castonguqy, A., Ghogha, A., Vayssiere, P., Pradhan, A.A., Xue, L., Wu, J, Levitt, P., **Olmstead, M.C.**, De Koninck, Y., Evans, C.J., & Cahill, C. M. (2016).

Neuroimmune regulation of GABergic neurons within the ventral tegmental area during withdrawal from chronic morphine. Neuropsychopharmacology, 41, 949-959.

Taylor, A., Castonguay, A., Taylor, A.J., Murphy, N.P., Ghogha, A., Cook, C., Xue, L, **Olmstead, M.C.**, De Konick, Y., Evans, C.J., & Cahill, C.M. (2015). Microglial disrupt mesolimbic reward circuitry in chronic pain. Journal of Neuroscience, 35, 8442-8450.

Magrys, S.A., **Olmstead, M.C.** (2015). Acute stress increases voluntary consumption of alcohol in undergraduates. Alcohol and Alcoholism, 50, 213-218.

Ong, E.W., Xue, L., **Olmstead, M.C.**, Cahill, C.M. (2015). Prolonged morphine treatment alters delta opioid receptor post-internalization trafficking. British Journal of Pharmacology, 172, 615-629.

Magrys, S.A., & **Olmstead, M.C.** (2014). Alcohol intoxication alters cognitive skills mediated by frontal and temporal brain regions. Brain and Cognition, 85, 271-276.

Mahoney, M.K., Silveira, M.M., & **Olmstead, M.C.** (2013). Increased impulsive action in rats: Effects of morphine in a short and long fixed-delay response inhibition task. Psychopharmacology, 230, 569-577.

Cahill, C.M., Xue, L., Holdridge, S., Grenier, P., Magnussen, C., Metcalfe, S., LeCourse, S., & **Olmstead, M.C.** (2013). Changes in morphine reward in a model of neuropathic pain. Behavioural Pharmacology, 24, 207-213.

Mahoney, M.K., & **Olmstead, M.C.** (2013). Neurobiology of an endophenotype: Modelling the progression of alcohol addiction in rodents. Current Opinions in Neurobiology, 23, 607-614.

Magrys, S.A., Wynne-Edwards, K.E., **Olmstead, M.C.**, & Balodis, I.S. (2013). Biochemical responses to alcohol intoxication in healthy males: relationship with impulsivity, drinking behaviour and subjective effects. Psychophysiology, 50, 204-209.

Magrys, S.A., Wynne-Edwards, K.E., **Olmstead, M.C.**, & Balodis, I.S. (2012). Biochemical responses to alcohol intoxication in healthy males: relationship with impulsivity, drinking behaviour and subjective effects. Psychophysiology (accepted).

Shea, A.J, Hewitt, A.M., **Olmstead, M.C.**, Brien, J.F., & Reynolds, J.M. (2012). Moderate ethanol consumption by the pregnant guinea pig produces neurobeahvioural deficits and increases ethanol preference in offspring. Behavioural Pharmacology, 23, 105-112.

Hayton, S.J., Maracle, A.C., & **Olmstead, M.C.** (2012). Opposite effects of amphetamine on impulsive action with fixed and variable delays to respond. Neuropsychopharmacology, 37, 651-659.

Hayton, S.J., Mahoney, M.K., **Olmstead, M.C.** (2012). Behavioral traits predicting alcohol drinking in outbred rats: An investigation of anxiety, novelty seeking, and cognitive flexibility. Alcoholism: Clinical and Experimental Research, 36, 594-603.

Hayton, S.J., **Olmstead, M.C.***, & Dumont, E.C*. (2011). Shift in the intrinsic excitability of medial prefrontal cortex neurons following training in impulse control and cued responding tasks. Public Library of Science (PLoS) One, 6, e23885. *shared senior authorship

Balodis, I.S., Wynne-Edwards, K.E. & **Olmstead, M.C.** (2011). The stress-response-dampening effect of placebo. Hormones & Behavior, 59, 465-472.

Tuerke, K.J., Paquette, J.J., Beninger, R.J. & **Olmstead, M.C.** (2011). Dissociable effects of ultra-low dose naltrexone on tolerance to the antinociceptive and cataleptic effects of morphine. Behavioural Pharmacology, 22, 558-563.

Befort, K., Mahoney, M.K., Chow, C., Hayton, S.J., Kieffer, B.L. & **Olmstead, M.C.** (2011). Differential contribution of mu and delta opioid receptor to impulsivity. Psychopharmacology, 214, 967-976.

Balodis, I.M., Wynne-Edwards, K.E. & **Olmstead, M.C.** (2010). The other side of the curve: examining the relationship between pre-stressor physiological responses and stress reactivity. Psychoneuroendocrinology, 35, 1363-1373.

Hayton, S.J., Lovett-Barron, M., Dumont, E.C. & **Olmstead, M.C.** (2010). Target-specific encoding of impulse control in the prefrontal cortex. Journal of Neuroscience, 30, 11493-11500. **Editor's choice for this issue; *Featured article in 'this week in the *Journal of Neuroscience*'.

Balodis, I.M., Potenza, M.N. & **Olmstead, M.C.** (2010). Recreational drug use and impulsivity in a population of Canadian undergraduate drinkers. Frontiers in Psychiatry, 1, 1-7.

Balodis, I.M. Lockwood, K.L. Magrys, S.A. & **Olmstead, M.C.** (2010). Preference conditioning in healthy individuals correlates with hazardous drinking. Alcoholism: Clinical and Experimental Research, 34, 1006-1012.

Balodis, I.M., Potenza, M.N. & **Olmstead, M.C.** (2009). Binge drinking in undergraduates: Binge drinking in undergraduates: Relationships with gender, drinking behaviors, impulsivity and the perceived effects of alcohol. Behavioural Pharmacology, 20, 518-526. *Invited special issue on impulsivity

Olmstead, M.C., Martin, A., Brien, J.F. & Reynolds, J.N. (2009). Chronic prenatal ethanol exposure increases disinhibition and perseverative responding in the adult guinea pig. Behavioural Pharmacology,20, 554-557. *Invited special issue on impulsivity

Olmstead, M.C., Ouagazzal, A. & Kieffer, B.L. (2009). Mu and delta opioid receptors oppositely regulate motor impulsivity in the signaled nose poke task. Public Library of Science (PLoS) One, 4, e4410.* Editor's Choice Science Feb. 20, 2009.

Paquette, J.J. Wang, H-Y., Bakshi, K. & **Olmstead, M.C.** (2007). Cannabinoid-induced tolerance is associated with a CB-1 receptor G-protein coupling switch that is prevented by ultra-low dose rimonabant. Behavioural Pharmacology,18, 767-776.

Balodis, I.M., Johnsrude, I.S. & **Olmstead, M.C.** (2007). Intact preference conditioning in acute intoxication despite deficient declarative knowledge and working memory. Alcoholism: Clinical and Experimental Research, 31, 109-117 .

Pohl, J.L., **Olmstead, M.C.**, Wynne-Edwards, K.E., Harkness, K.L. & Menard, J.L. (2007). Repeated exposure to stress across the peripubertal-juvenile period alters rats' anxiety- and depression-like behaviors in adulthood: The importance of stressor type and gender. Behavioral Neuroscience, 121, 462-474.

Olmstead, M.C. (2006). Animal models of drug addiction: Where do we go from here? Quarterly Journal of Experimental Psychology, 59, 625-653.

Balodis, I, MacDonald, T.K. & **Olmstead, M.C.** (2006). Instructional cues modify performance in the Iowa Gambling Task. Brain and Cognition, 60, 109-17.

Olmstead, M.C., Hellemans, H.G.C. & Paine, T.A. (2006). Alcohol-induced impulsivity in rats: An effect of cue salience? Psychopharmacology, 184, 221-228.

Hellemans, K.G.C., Nobrega, J.N. & **Olmstead, M.C.** (2005). Early environmental experience alters baseline and ethanol-induced cognitive impulsivity: Relationship to forebrain 5-HT_{1A} receptor binding. Behavioural Brain Research, 159, 207-220.

Olmstead, M.C. & Burns, L.H. (2005). Ultra-low-dose naltrexone suppresses rewarding effects of opiates and aversive effects of opiate withdrawal in rats. Psychopharmacology, 181, 576-581.

Hancock, S.D., Menard, J.L. & **Olmstead, M.C.** (2005). Variations in maternal care influence vulnerability to stress-induced binge eating in female rats. Physiology and Behavior, 85, 430-439.

Wang, H.-Y., Friedman, E., **Olmstead, M.C.** & Burns, L.H. (2005). Ultra-low-dose naloxone attenuates chronic morphine-induced changes in Mu opioid receptor – G protein coupling and G βγ signalling. Neuroscience, 135, 247-261.

Paquette, J.J. & **Olmstead, M.C.** (2005). Ultra-Low Dose Naltrexone Enhances Cannabinoid-Induced Antinociception. Behavioural Pharmacology, 16, 597-603.

Hayward, M.L., Martin, A.E., Brien, J.F., Dringenberg, H.C., **Olmstead, M.C.** & Reynolds, J.N. (2004). Chronic prenatal ethanol exposure impairs conditioned responding and enhances GABA release in the hippocampus of the adult guinea pig. Journal of Pharmacology and Experimental Therapeutics, 308, 644-650.

Paine, T.A. & **Olmstead, M.C.** (2004). Cocaine disrupts both behavioural inhibition and conditional discrimination in rats. Psychopharmacology, 175, 443-450.

Hellemans, K.G.C., Benge, L.C. & **Olmstead, M.C.** (2004). Adolescent enrichment partially reverses the social isolation syndrome. Developmental Brain Research, 150, 103-115.

Dringenberg, H.C. & **Olmstead, M.C.** (2003). Integrated contributions of basal forebrain and thalamus to neocortical activation elicited by pedunculopontine tegmental stimulation in urethane anesthetized rats. Neuroscience, 119, 839-853.

Ortner, C.N.M., MacDonald, T.K. & **Olmstead, M.C.** (2003). Alcohol decreases impulsivity in a delay discounting task in humans. Alcohol and Alcoholism, 38, 151-156.

Halpert, A.G., **Olmstead, M.C.**, & Beninger, R.J. (2003). Dimenhydrinate produces a conditioned place preference in rats. Pharmacology, Biochemistry and Behavior, 175, 173-179.

Paine, T.A., Dringenberg, H.C. & **Olmstead, M.C.** (2003). Effects of chronic cocaine on impulsivity: Relation to cortical serotonin mechanisms. Behavioural Brain Research, 147, 135-147.

Paine, T.A., Jackman, S.L. & **Olmstead, M.C.** (2002). Psychopharmacology of cocaine-induced anxiety: Role of benzodiazepine, serotonin, and anti-histamine systems. Behavioural Pharmacology, 13, 511-23.

Halpert, A.G., **Olmstead, M.C.** & Beninger, R.J. (2002). Mechanisms and abuse liability of dimenhydrinate. Neuroscience and Biobehavioral Reviews, 26, 61-67.

Hellemans, K.G.C., Shaham, Y. & **Olmstead, M.C.** (2002). Dissociable effects of acute and prolonged opiate abstinence on drug-seeking and drug-taking. Canadian Journal of Experimental Psychology, 56, 241-252.

Powell, K.J., Abul-Husn, N.S., Jhamandas, A., **Olmstead, M.C.**, Beninger, R.J. & Jhamandas, K. (2002). Paradoxical effects of the opioid antagonist naltrexone on morphine analgesia, tolerance and reward. Journal of Pharmacology and Experimental Therapeutics, 300, 588-596.

Olmstead, M.C., Lafond, M. Everitt, B.J. & Dickinson, A. (2001). Cocaine-seeking by rats is a goal-directed action. Behavioral Neuroscience, 115, 394-402.

Johnston, L.D., Beninger, R.J. & **Olmstead, M.C.** (2001). Pimozide, like extinction, devalues stimuli associated with sucrose-taking. Pharmacology, Biochemistry and Behavior, 68, 583-590.

Inglis, W.L., **Olmstead, M.C.** & Robbins, T.W. (2001). Ibotenate lesions of the pedunculopontine tegmental nucleus induce deficits in a continuous performance attentional task. Behavioral Brain Research, 123, 117-131.

Inglis, W.L., **Olmstead, M.C.**, & Robbins, T.W. (2000). Pedunculopontine tegmental nucleus lesions impair stimulus-reward learning in autoshaping and conditioned reinforcement paradigms. Behavioral Neuroscience, 114, 285-294.

Olmstead, M.C., Parkinson, J.A., Miles, F.J., Everitt, B.J. & Dickinson, A. (2000). Cocaine-seeking by rats: Regulation, Reinforcement and Activation. Psychopharmacology, 152, 123-131.

Everitt, B.J., Parkinson, J.A., **Olmstead, M.C.**, Arroyo, M., Robledo, P. & Robbins, T.W. (1999). Associative processes in addiction and reward: the role of amygdala-ventral striatal subsystems. Annals of the New York Academy of Sciences, 877, 412-438.

Parkinson, J.A., **Olmstead, M.C.**, Burns, L.H., Robbins, T.W. & Everitt, B.J. (1999). Dissociation in effects of the nucleus accumbens core and shell on appetitive Pavlovian approach behavior and the potentiation of conditioned reinforcement and locomotor activity by *d*-amphetamine. Journal of Neuroscience, 19, 2401-2411.

Olmstead, M.C., Inglis, W.L., Bordeaux, C.P, Clarke, E.J., Wallum, N.P., Everitt, B.J. & Robbins, T.W. (1999). Lesions of the pedunculopontine tegmental nucleus do not affect sucrose consumption, choice or contrast effects. Behavioral Neuroscience, 113, 732-743.

Olmstead, M.C., Munn, E.N., Franklin, K.B.J. & Wise, R.A. (1998). Effects of pedunculopontine tegmental nucleus lesions on responding for intravenous heroin under different schedules of reinforcement. Journal of Neuroscience, 18, 5035-5044.

Olmstead, M.C., Robbins, T.W. & Everitt, B.J. (1998). Basal forebrain cholinergic lesions enhance conditioned approach responses to stimuli predictive of food. Behavioral Neuroscience, 112, 611-629.

Olmstead, M.C. & Franklin, K.B.J. (1997). Development of a conditioned place preference to morphine: Effects of lesions of various CNS sites. Behavioral Neuroscience, 111, 1313-1323.

Olmstead, M.C. & Franklin, K.B.J. (1997). Development of a conditioned place preference to morphine: Effects of microinjections into various CNS sites. Behavioral Neuroscience, 111, 1324-1334.

Olmstead, M.C. & Franklin, K.B.J. (1996). Differential effects of ventral striatal lesions on the conditioned place preference induced by morphine or amphetamine. Neuroscience, 71, 701-708.

Olmstead, M.C. & Franklin, K.B.J. (1994). Lesions of the pedunculopontine tegmental nucleus abolish catalepsy and locomotor depression induced by morphine. Brain Research, 662, 134-140.

Olmstead, M.C. & Franklin, K.B.J. (1994). Lesions of the pedunculopontine tegmental nucleus block drug-induced reinforcement, but not stimulant-induced locomotion. Brain Research, 638, 29-35.

Olmstead, M.C. & Franklin, K.B.J. (1993). Effects of pedunculopontine tegmental nucleus lesions on morphine-induced conditioned place preference and analgesia in the formalin test. Neuroscience, 57, 411-418.

Kofman, O., McGlynn, S., **Olmstead, M.C.** & Yeomans, J.S. (1990). Differential effects of atropine, procaine, and dopamine in the rat ventral tegmentum on lateral hypothalamic rewarding brain stimulation. Behavioural Brain Research, 38, 55-68.

Edited Books

Olmstead, M.C. (Ed.) (2016). Animal Cognition: Principles, Evolution, and Development. New York, NY: Nova Press Inc.

Olmstead, M.C. (Ed.) (2015). Psychology of Impulsivity. New York, NY: Nova Press Inc.

Olmstead, M.C. (Ed.) (2011). Animal Models of Drug Addiction. Totowa NJ: Humana Press Inc.

Book Chapters

Olmstead, M.C., & Kuhlmeier, V.A. (2021). Comparative cognition. In: Ridley, A.R., d'Ettorre, P., & Freeberg, T.M. (Eds.) Handbook of Comparative Psychology. New York: Routledge, Taylor and Francis.

Awad, G., Befort, K., & **Olmstead, M.C.** (2020). Artificial sweeteners in animal models of binge eating. In: Avena, N.M. (Ed.) Animal Models of Eating Disorders. Volume in Neuroscience Methods Series. New York NY: Springer Inc

Hancock, S.D., & **Olmstead, M.C.** (2011). Animal models of eating disorders. In: Olmstead, M.C. (Ed.). Animal Models of Drug Addiction. Totowa NJ: Humana Press Inc.

Balodis, I.M. & **Olmstead, M.C.** (2009). Laboratory measures of risk-taking: Relevance to pathological gambling. In: Columbus, F.E. (Ed.). The Psychology of Gambling. Hauppauge HY: Nova Science Publishers.

Hayton, S.J. & **Olmstead, M.C.** (2009). Fractionating animal models of motor impulsivity: Reconciling the neurochemistry of disinhibition. In: Granon, S. (Ed.) Endophenotypes of psychiatric and neurodegenerative disorders in animal models. Kerala India: Transworld Research Network.

Burns, L.H., Leri, F. & **Olmstead, M.C.** (2006). Ultra-low-dose naltrexone reduces dependence and addictive properties of opioids. In: Dean, R., Bilsky, E., Negus, S. & Wickens J. (Eds.). Opioid Receptors and Antagonists: From Bench to Clinic. Volume in Contemporary Neuroscience Series.

Beninger, R.J. & **Olmstead, M.C.** (1999). The role of dopamine in the control of locomotor activity and reward-related incentive learning. In: Miller, R. & Wickens, J. (Eds.) Brain Dynamics and the Striatal Complex. Chur, Switzerland: Harwood Academic Publishers.

Technical Reports

Simpson, J & **Olmstead, M.C.** (2009). Internet addiction in university students: what to look for. Report to Queen's University residence Dons and student advisors.

Dennis, K. & **Olmstead, M.C.** (2001). Community Stabilisation Program at Options for Change, Kingston Ontario. Submission to Ontario Substance Abuse Bureau and Ontario Addiction Services Advisory Council.

Millikin, R.L., Dysarsz, H., Matsuda, B. & **Olmstead, M.C.** (2000). Efficacy of the Suppression and Conditioning Apparatus and the Consequent Behaviour Modification in Birds. Report to Transport Canada and Vancouver International Airport Authority.

Conference Presentations

I presented my first poster at a scientific meeting in 1991 (Society for Neuroscience). Since then, I have presented a total of 152 posters at national and international meetings (e.g., Canadian Society for Brain, Behaviour and Cognitive Science, European Behavioural Pharmacology Society, International Society for Behavioral Neuroscience, Society for Neuroscience, etc.).

INVITED TALKS

Olmstead, M.C. Comparative cognition in conservation. Psychologie a Université de Strasbourg, Strasbourg France, June 2023.

Olmstead, M.C. Reward-immune interactions uncover risk factors for Long COVID. Canadian Association for Psychologists for Disability Assessment, Toronto ON Dec. 2022.

Olmstead, M.C. Animal models of addictive disorders. NeuroFrance, Illkirch France, May 2022.

Olmstead, M.C. Reward-immune interactions link sucrose-bingeing rats to COVID-19 patients. McMaster Neuroscience Graduate Program Colloquium, Hamilton ON Nov. 2021.

Olmstead, M.C. Reward-immune interactions: How COVID-19 reshaped our research program. University of Toronto, Brain and Behaviour Seminar Series, Toronto ON March 2021.

Olmstead M.C. Studying addiction within a dimensional framework. International conference on Neurology and Neuro Disorders. Paris France, Sept. 2020.

Olmstead, M.C. The morning after (legalization): What can we learn from neuroscience research? Science College Public Lecture, Montreal QU, Oct. 2018.
This lecture on the public understanding of science was covered in a number of news agencies including: *Evidence proves teens at risk from marijuana.* The Laval news Nov 7, 2018. https://www.lavalnews.ca/2018/11/07/teens-at-risk-from-marijuana/

Olmstead, M.C. The opioid epidemic: this is not fake news. Laboratoire de Cognitives et Neurosciences Adaptives, Strasbourg France June 2018.

McKay M., Maihiot, M., Grenier, P., & **Olmstead, M.C.** Disruption of morphine reward by dopamine D1 antagonism in pain-naïve but not chronic pain states. Southern Ontario Neuroscience Association Guelph ON May 2018.

Olmstead, M.C. Transitioning to drug abuse: Insight from animal models. Regard croisés sur Les Addiction. Université de Strasbroug. Strasbourg France April 2018.

Olmstead, M.C. Lost in translation: Moving from human to animal studies of anhedonia. Institut des Neurosciences Cellulaires et Integratives, Strasbourg, France Sept. 2017.

Olmstead, M.C. Neurocircuitry of binge eating: Alterations in reward processing. Canadian College of Neuropsychopharmacology, Kingston ON, June 2017.

Olmstead, M.C. Banting Postdoctoral Fellowships: Recommendations for applicants. School of Graduate Studies, Queen's University. Kingston ON. June 2016, 2017.

Olmstead, M.C. This is your brain on drugs. Student Outreach, Kingston ON, May 2017.

Olmstead, M.C. Basic-Applied translation in alcohol research. Alcohol Working Group, Dean of Student Affairs, Queen's University. March 2017

Olmstead, M.C. Animal models of psychiatric disorders: Addiction. Dept. of Psychiatry Grand Rounds, Queen's University School of Medicine. Kingston ON. Feb. 2017.

Olmstead, M.C. Neurobiology of an endophenotype: modeling the progression of alcohol addiction in rodents. International Conference and Exhibition on Addiction, Orlando, Florida, Aug, 2015. (declined).

Olmstead, M.C. Risk factors associated with excessive drinking in undergraduates. Behavioral Neuroscience Summer Seminar Series, Kingston, ON, May 2015.

Olmstead, M.C. Addiction: This is your brain on drugs. Outreach Kingston Frontenac Public Library, Kingston, ON, Feb., 2015.

Olmstead, M.C. Neuroscience of Homeopathy. Centre for Studies in Behavioural Neurobiology, Montréal, QUE, Feb., 2015.

Olmstead, M.C. Neurobiology of Impulsivity: Relevance to Addiction. Dept of Psychology, Concordia University, Montreal, QUE, Feb., 2015.

Olmstead, M.C. The feasibility of ultra-low dose compounds to treat chronic pain. Kingston Orthopaedic Pain Institute, Kingston ON, Dec., 2014.

Olmstead, M.C. Behavioural effects of ultra-low dose antagonism: Is less more? Douglas Research Institute, McGill University, Montreal QUE, Dec. 2013.

Olmstead, M.C. Ultra-low dose antagonist effects of cannabinoids and opioids: Is less more? Abcan Medicinals Organization Meeting, Kingston ON, Oct. 2013.

Olmstead, M. C. Neurobiology of Impulsivity: Relevance to Addiction. Canadian Academy of Health Sciences, Ottawa ON, Sept. 2013.

Olmstead, M.C. Cortico-striatal circuits in controlling responding for incentive stimuli. Canadian Congress on Neuropsychopharmacology, Toronto ON, June 2013.

Olmstead, M.C. Affective states associated with chronic pain. International Congress on Neuropathic Pain, Toronto ON, May 2013.

Olmstead, M.C. Animal models of psychiatric disorders: A focus on addiction. Dept. Psychiatry, Queen's University Kingston ON, Feb. 2013.

Olmstead, M. C. Behavioral and neural effects associated with sucrose bingeing. Winter Conference on Brain Research, Snowmass CO, Jan. 2013

Olmstead, M.C., Mahoney, M.K., & Hayton, S.J. Behavioral traits predicting alcohol intake in rats: Anxiety, novelty-seeking and cognitive flexibility. *Nanosymposium on Vulnerability to Drug Self-Administration and Addiction*. Society for Neuroscience, New Orleans LA, Oct. 2012.

Olmstead, M.C. Evolution of Psychological Traits: The Cost of Language and other Cognitive Functions. Université de Montpellier II, Montpellier, France, Mar. 2012.

Olmstead, M.C. Comparative cognition: Synthesis of experimental psychology and behavioural ecology. Centre d'Ecologie Functionelle et Evolutive, Montpellier France, Oct. 2011.

Mahoney, M.K., Befort, K., & **Olmstead, M.C.** Mu opioid signalling increases motor impulsivity in a set delay response inhibition task in rodents. European Behavioural Pharmacology Society, Amsterdam Netherlands, Aug. 2011.

Olmstead, M.C. Developmental factors contributing to impulsivity. EPS Global International Forum on Neuroscience, Jiangsu China July 2011.
(not accepted).

Mahoney, M.K., Befort, K., & **Olmstead, M.C.** Mu opioid signalling increases motor impulsivity in a set delay response inhibition task in rodents. European Behavioural Pharmacology Society, Amsterdam Netherlands, Aug. 2011.

Hayton, S.J., Dumont, E.C., **Olmstead, M.C.** Waiting for 'The Go': Neural substrates of impulse control in the medial prefrontal cortex. Canadian Society for Brain, Behaviour, and Cognitive Science, Winnipeg MA, June 2011.

Olmstead, M.C. Modelling the progression of drug addiction: A French-Canadian collaboration. Seminar on Neurosciences, General Consulate of France in Toronto (Office for Science and Technology). Toronto Ontario, Oct. 2010.

Hayton, S.J., & **Olmstead, M.C.** Target-specific enhancement of synaptic strength following training in a simple impulse control task. European Behavioural Pharmacology Society. Rome Italy, Sept. 2009.

Magnussen, C., Sutherland, K.A., **Olmstead, M.C.** & Cahill, C.M. Conditioned place preference predicts drug effectiveness in alleviating neuropathic pain. International Narcotics Research Conference, Portland OR, July 2009.

Olmstead, M.C. A Role for Mu Opioid Receptors in Impulsivity. International Behavioural Neuroscience Society. Nassau Bahamas, June 2009

Olmstead, M.C. Addiction: This is your brain on drugs. Shad Valley Summer Enrichment Program, Kingston ON, June 2009.

Olmstead, M.C. Impulsivity and Addiction: Incorporating Nicotine. Nicotine/tobacco CTCRI ICE team meeting. McGill University, Montreal QC, Dev., 2008.

Olmstead, M.C. Developmental Neurobiology: Early Life Stress and Adult Psychopathology. Canadian Society for Brain, Behaviour and Cognitive Science (symposium organizer) London ON, June 2008.

Olmstead, M.C. Alcohol intoxication in undergraduates: Alterations in cognitive-affective processing. Psychology Seminar Series, Carleton University, Ottawa ON, Feb. 2008.

Olmstead, M.C. A role for mu-opioid receptors in impulsivity. Winter Conference on Brain Research, Snowbird UT, Jan. 2008.

Olmstead, M.C. Alcohol intoxication in undergraduates: Alterations in cognitive-affective processing. Psychology Seminar Series, Brock University, St. Catherines ON, Jan. 2008.

Olmstead, M.C. :Ultra-low dose cannabinoids modulate pain mechanisms. Astra-Zeneca Invited Authority Series, Montreal QC, Dec., 2007.

Olmstead, M.C. Opioid mechanisms in addictive behaviours. Institut de Génétique et de Biologie Moléculaire et Cellulaire, Illkirch France, March 2007.

Olmstead, M.C. Variations in maternal care influence vulnerability to stress-induced binge eating in female rats. Winter Conference on Brain Research, Snowmass CO, Jan, 2007.

Olmstead, M.C. Animal models of drug addiction: Where do we go from here?. Institut de Génétique et de Biologie Moléculaire et Cellulaire, Illkirch France, Sept. 2006.

Olmstead, M.C. Modeling drug abuse in rats: the role of impulsivity. Dept. of Psychology Colloquium Series, Memorial University of Newfoundland, St. John's NFLD, June 2006.

Olmstead, M.C. Modeling drug abuse in rats: the role of impulsivity. Dept. of Psychology Colloquium Series, University of Ottawa, Ottawa ON, March 2006.

Olmstead, M.C. Principles of animal learning applied to species control. ECHOTRACK, RMC, Ottawa ON, March 2006.

Olmstead, M.C. Animal models of drug addiction: where do we go from here? Centre of Excellence for Drug Discovery, GlaxoSmithKline Pharmaceuticals, Verona Italy, Aug. 2005.

Olmstead, M.C. Cannabinoid mechanisms in pain and analgesia. Universidad Pompeu Fabra, Barcelona Spain, Aug. 2005.

Olmstead, M.C. The 'ultra-low dose' story. Institut de Génétique et de Biologie Moléculaire et Cellulaire, Illkirch France, Aug. 2005.

Pohl, J., Paine, T.A., Dringenberg, H.C. & **Olmstead, M.C.** Adult/adolescent differences in synaptic plasticity following chronic cocaine exposure. Brain, Behaviour and Cognitive Science Annual Meeting, Montreal QC, June 2005.

Olmstead, M.C. Addiction as a disorder of impulse control. Dept. of Psychology Colloquium Series University of Guelph, Guelph ON, March 2005.

Olmstead, M.C. Drug addiction and impulsivity: what is the relationship? University of Toronto at Mississauga Colloquium Series, Toronto ON, Feb. 2005.

Hancock, S.D., Menard, J.L. & **Olmstead, M.C.** Variations in maternal care influence vulnerability to stress-induced binge eating in female rats. Brain, Behaviour and Cognitive Science Annual Meeting, St. John's NF, June 2004.

Hellemans, K.G.C. & **Olmstead, M.C.** Early environmental experience influences impulsive choice following alcohol intoxication. Brain, Behaviour and Cognitive Science Annual Meeting, Hamilton ON, June 2003.

Paine, T.A., Dringenberg, H.C. & **Olmstead, M.C.** Effects of chronic cocaine on impulsivity: relation to cortical serotonin mechanisms. Brain, Behaviour and Cognitive Science Annual Meeting, Hamilton ON, June 2003.

Olmstead, M.C. What have we learned from animal models of drug addiction? Winnipeg Regional Health Care Workers, Winnipeg MA, April 2003

Olmstead, M.C. Impulsivity and drug addiction: what is the relationship? Department of Pharmacology and Toxicology Seminar Series, Queen's University, Kingston ON, March 2003.

Olmstead, M.C. Neurochemistry of Love / La Neuropsychologie de l'Amour Department de Francais Invited Colloquium, Queen's University, Kingston ON, March 2003.

Hellemans, K.C.G. & **Olmstead, M.C.** Adverse early experience: influences on the propensity to abuse drugs. Department of Psychology Colloquium, University of Alberta, Edmonton AB, March 2003.

Hellemans, K.C.G. & **Olmstead, M.C.** Effects of early environmental experience on neural and behavioural changes implicated in drug abuse. Animal Cognition Seminar Series, University of Western Ontario, London ON, Oct. 2002.

Olmstead, M.C. Modeling drug abuse with IV drug self-administration in rats neurobiology of drug craving versus drug-taking. Neuroscience Seminar Series, University of Alberta, Edmonton AB, Oct. 2000.

Millikin, R.L., Dysarsz, H., Matsuda, B. & **Olmstead, M.C.** Feasibility of a suppression and conditioning apparatus as a means of bird control. Vancouver International Airport, Vancouver BC, Dec. 2000.

Olmstead, M.C. Brain mechanisms underlying drug dependence in rats. Pharmacology Seminar Series, McGill University, Montreal QUE, Nov. 2000.

Olmstead, M.C. Classical conditioning and avoidance learning in animals. Vancouver Airport Authority and Ministry of Transportation, Vancouver BC, June 2000

Olmstead, M.C. Isolation of factors that mediate drug-seeking and drug-taking in the rat self-administration paradigm. National Institute of Drug Abuse, Baltimore MD, June 2000.

Olmstead, M.C. Psychological factors mediating the self-administration of abused drugs. Neuroscience Seminar Series, Queen's University, Kingston ON, Oct. 1999.

Olmstead, M.C. Reward mechanisms beyond the ventral striatum: The role of the NBM in conditioned and unconditioned responses to appetitive stimuli. British Association for Psychopharmacology and Canadian College of Neuropsychopharmacology Annual Meeting, Cambridge UK, July 1997.

Olmstead, M.C. The pedunculopontine tegmental nucleus: Part II. Grindley Seminar Series, Dept. of Experimental Psychology, University of Cambridge, Cambridge, UK, June 1997.

Olmstead, M.C. Fractionation of reward-related processes: A neurobiological approach. Psychology Colloquim Series, Queen's University, Kingston ON, June 1997.

Olmstead, M.C. Integration of motivation and cognition at the level of the brainstem pedunculopontine tegmental nucleus. Grindley Seminar Series, Dept. of Experimental Psychology, University of Cambridge, Cambridge UK, Feb. 1996.

Olmstead, M.C. Learning about reward in the conditioned place preference paradigm. Animal Learning Lunch-Time Seminar Series, Dept. of Experimental Psychology, University of Cambridge, Cambridge UK, Nov. 1995.

PATENTS

Title: Methods and therapies for potentiating therapeutic activities of a cannabinoid receptor agonist via administration of a cannabinoid receptor antagonist
Date filed: Aug. 26, 2005
Countries: Canada/USA
Co-inventor: Jay J. Paquette
Serial No. US Provisional Patent Application No. 60/711,813

TEACHING

Undergraduate Courses

History of Modern Psychology	2013-present
Comparative Cognition	2009-preent
Behavioral Pharmacology	2019-2022
Comparative Cognition: Lab in Animal Learning	2016
Brain and Behaviour	2015
Psychopharmacology	2005, 2007-2011
Research Problems in Animal Learning	2005
Brain and Emotion	2003
Neuropsychology	2001
Neurobiological Bases of Drug Addiction	2000
Experimental Analysis of Behaviour: Learning	1999-2008
Brain and Behaviour II	1999-2001
Neurobiology of Learning and Memory	1998, 1999

Graduate Courses

Cognitive Neuropharmacology	2019
Écologie Comportementale (team taught)	2011
Comparative Neurocognition	2009, 2012-14, 2019
Neuroethology	2007, 2010
Animal Learning / Behavioural Ecology	2002, 2004, 2008
Basic Principles of Behavioural Neuroscience (team taught)	2001

Student Supervision

Currently: 2 PhD, 1 MSc, 4 BSc students
Graduated: 3 PDF, 14 PhD, 22 MSc and 58 BSc students.

ADMINISTRATION

Grant Review Panels

Canadian Institutes of Health Research (CIHR)	2020-2023
Pharmacology and Toxicology committee member	
New Frontiers in Research Fund (NFRF) Exploration	2020-2021
Chair	
New Frontiers in Research Fund (NFRF) Exploration	2018-2020
Committee member: NSERC representative	
Science Foundation Ireland	2017
Strategic Partnership Program (O'Mara)	
Canadian Institutes of Health Research	2017-2020
College of Reviewers	
Natural Sciences and Engineering Research Council of Canada	2017-2018
Chair: Banting Postdoctoral Fellowship Awards	
Natural Sciences and Engineering Research Council of Canada	2014-2017
Banting Postdoctoral Fellowship Awards	
National Institute of Health (NIH: USA)	2012-2013
Biobehavioral and Behavioral Processes Integrated Review Group	
Biobehavioral Regulation, Learning and Ethology Study Section	
Agence Nationale de la Recherche (France)	2012-2015
Executive Review Committee: Neuroscience	
Centre National de la Recherche Scientifique (France)	2012
Habilitation à Diriger les Recherches en Sciences de la Vie	
Natural Sciences and Engineering Research Council of Canada	2010-2011
Co-chair, Biological Systems and Function	
Natural Sciences and Engineering Research Council of Canada	2007-2009
Committee member, Brain Behaviour and Cognition	
Canadian Institutes of Health Research	2001-2006
Behavioural Sciences A Committee	

Editorship

Editorial Board, Reviewing Editor	2019-
Public Library of Science (PLoS) One	

Special Issue: *Substances Use, Misuse, and Dependence: Prevention and Treatment*

Editorial Board 2014-2019
International Journal of Neurology Research

International Editorial Advising Board
Current Drug Research Reviews 2018-
Current Drug Abuse Reviews 2007-2018

Field Editor 2006-2018
Quarterly Journal of Experimental Psychology

Grant Reviewer

Agence Nationale de la Recherche (France)
Canada Research Chairs Renewal (Tier II)
Canadian Institutes of Health Research
Canadian Foundation for Innovation
Children's Hospital of Eastern Ontario
Medical Research Council of Canada
Medical Research Council (UK)
Michael Smith Foundation for Human Research
Misssion Interministérielle de Lutte contra la Drogue et al Toxicomaine (MILDT) (France)
Natural Sciences and Engineering Research Council of Canada
Netherlands Organization for Health Research and Development (EU)
Nova Scotia Mental Health Foundation
Ontario Mental Health Foundation
Toronto Hospital for Sick Children

Journal Reviewer

Behavioral Neuroscience
Behavioural Brain Research
Behavioural Pharmacology
Brain Research
Brain Research Bulletin
Brain Research Reviews
European Journal of Neuroscience
Journal of Neuroscience
Music Perception
Neuropsychopharmacology
Neuroscience
Psychopharmacology
Physiology and Behavior
Psychopharmacology

Department of Psychology, Queen's University

Queen's University Faculty Association (QUFA) Council Rep 2018-
Associate Head: Teaching and Learning 2014-2017

Committee Chair

Cognitive Neuroscience Research Group	2021
Promotion, renewal and tenure	2013-2014
Appointments	2013-2014
Animal Advisory Group	2012-2019
Space Committee	2008-2010
Appointments	2005-06, 2007-08
Promotion, renewal and tenure	2005-06, 2007-08
Behavioural neuroscience comprehensive exam	1998-present
World wide web co-ordinator	1998-1999

Committee Member

Capital Working Group	2021-
Advisory Committee, CogNS Job Search	2021-2022
COVID Space Committee	2020-2022
Priorities and Procedures (non-voting member)	2014-2017
Undergraduate	2014-2017
Merit	2014-2015
Headship	2014-2015
Priorities and Procedures	2008-2011
Headship committee	2007-2008
Merit committee	2005-2006
Appointments	2004-2005, 2009-10
Promotion, Renewal and Tenure	2004-2005, 2009-10
Animal advisory group	2000-2017
Undergraduate committee	1999-2003, 2007-10
Undergraduate academic advisor	1999-2003, 2007-10
Space committee	1998-1999

Ad Hoc Duties

CRC Search	2012
NSERC USRA rankings	2009
NSERC PGSA rankings	2009
Psychology Careers Night, guest speaker	2003
Psychology degrees, orientation for incoming students	2003
APA graduate research scholarship, internal candidate ranking	2002
Andy McGhie prize for best Ph.D. thesis	2001
Behavioural neuroscience, job search	2001

Queen's University

QUFA President	2023-2025
QUFA Vice President	2022-2023

Committee Chair or Co-Chair

QSSET: Survey Student Experience & Teaching	2022-2023
QUFA Student Accommodation Working Group	2019-2022
QUFA Council Alternate Chair	2020-2022
Student Accommodation Working Group, Co-chair	2020-2021
Nominating committee	2004-2005
Pain research group, journal club (co-coordinator)	2004-2006

Committee Member

Board of Trustees (observer)	2022-
Senate Agenda and Summer Action Committee	2022-
QUFA Nominating Committee	2020-2021
QUFA Grievance Committee	2022-
QUFA Political Action Committee	2022-
Senate	2021-
Chancellor's Scholarships, Reader	2016-2019, 2022
Ontario University Fair rep Faculty of Arts and Science	2015-2017
Queen's University Open House	2015-2017
Canada Graduate Scholarship (MSc), School of Graduate Studies	2014-2017
Education and Training, Centre for Neuroscience Studies	2014-2017
Curriculum committee, Faculty of Arts and Science	2014-2017
Headship Committee (Dept. Biology)	2012-2013
University Animal Care Committee	2009-2011
Nominating committee	2004-2005
Promotion, Renewal and Tenure, Rehabilitation Medicine	2004-2006
Animal User Training Program, curriculum development	2003
Major Entrance Scholarships and Awards, candidate ranking	2003
Pain Steering Committee, Centre for Neuroscience Studies	2002-2006
Radio Policy Board	2002-2006
Centre for Neuroscience Studies, job search	2002
Canada Research Chair in Neuroscience, job search	2002
Inspection of Level D Laboratories	2001-2003
Dean's Visible Minorities Awards	2001
University Committee on Animal Care	1998-2003
Advisory Research Council, Grants committee	1998-2001

Academic and Research Reviews

Conflict Resolution Reviewer (2021)
Animal Ethics Application
University of Alberta

Phd Proposal Program Review (2021)
Dept. Psychology
Trent University

Independent Assessment Report (2020)
Protected Disclosure and Research Integrity Office
University of Calgary

Academic Program Review (2019-20)
Dept. Psychology
University of Alberta
Academic Program Review (2019)
Dept. of Psychology
Laurentian University
Tenure File Review (2019)
Dept. Psychiatry, University of California, San Diego
CRC Tier II renewal (2018)
Dept. Neuroscience, University of Lethbridge
Promotion to Full Professor (2018)
Dept. Neuroscience, Carleton University
Academic Program Review (2018)
School of Psychology
University of Ottawa
Academic Program Review (2018)
Neuroscience Program
Brock University
Promotion to Full Professor (2017)
Centre for Studies in Behavioural Neurobiology, Concordia University
Tenure file review (2017)
Dept. of Psychology
Loyola University, Chicago IL
Tenure file review (2016)
Dept. of Psychology
University of Toronto at Scarborough
Academic Program Review (2013)
Dept. of Psychology
Memorial University of Newfoundland and Labrador (MUN
Promotion to Full Professor (2013)
Dept. of Psychology, University of Guelph

Provincial and National Organisations

Southern Ontario Neuroscience Association (SONA) 2022-2023
Co-president
Canadian College of Neuropsychopharmacology (CCNP) 2016-17
Organizing committee, annual meeting
Southern Ontario Neuroscience Association (SONA) 2015-
Councillor
Regiopolis Notredame Secondardy School 2015-
Science Coordinator, IB Program
Addiction Services in Frontenac County, Kingston ON 2003
Biannual Organization review
Limestone District School Board, Kingston ON 2002-2003
OAC Biology community project
Ontario Substance Abuse Bureau, Toronto ON 2002

Program restructuring, strategy planning
Options for Change, Kingston ON 2001-2006
Board of Directors
Community Addiction Treatment Services, Kingston ON 2001-2006
Program committee
Options for Change, Kingston ON 2001
Interview committee, program director
Canada Wide Science Fair, Kingston ON 2001
Judge
Ranger Pacific, Vancouver BC 2001-2003
Board of Directors
HIV/AIDS Regional Services, Kingston ON 2001
Conflict of Interest Guidelines
Options for Change, Kingston ON 2000
Interview committee, executive director
Brain, Behaviour and Cognitive Science, Edmonton AB 1999
Graduate student presentations, judge
Alcohol and Drug Referral Centre, Kingston ON 1999-2001
Board of Directors
Frontenac County Science Fair, Kingston ON 1998-2003
Life Sciences, section judge

Other Activities

Southern Ontario Neuroscience Association (SONA)

As co-president of SONA, I (along with my co-host Rutsuko Ito) organized the annual SONA meeting that was held at University of Toronto Scarboro (UTSC) in May 2023. Along with a group of graduate students at each institution, we secured funding from industrial and academic partners, selected presentation venues, invited speakers, organized poster sessions, scheduled social events, coordinated judging of trainee posters, collated a meeting program, etc.

H'art Centre
Board of Directions
Sept 2021-
H'art is a non-profit community organization promoting inclusive arts for all abilities. My role is to develop programs and secure funding that supports experiential learning opportunities for Queen's students.

Duke of Edinburgh's International Award
Award Leader
Queen's University chapter
Jan. 2021-2024
An international organization with the goal of helping young people to discover their infinite potential. The award leader is a volunteer appointed by an Award Centre who is the contact and

mentor for a chapter. The Award Leader is responsible for engaging young people in their Award programme, inspiring, guiding and assisting them from start through to completion.

Women in Science (WiSE) Graduate Networking Event
Queen's University chapter
April 2019
WiSE is a student-run association in the Queen's community that promotes the education and successes of women in STEM related fields. The event was a panel presentation and question/answer session to create greater awareness of opportunities that are available in the Kingston community.

Limestone Scholars
Teaching Best Research Practices to Middle and High School Students
Faculty Advisor
July 2020-
In response to COVID-19 pandemic shutdowns, RISE was transformed into Limestone Scholars, a not-for-profit virtual platform and system of webinars to support teachers and students in developing best research practices.

Research and Information Science Education (RISE)
Queen's University Outreach to Secondary Schools
Faculty Advisor
Aug. 2015-July 2020
RISE is a not-for-profit research skills and science outreach program targeted at middle school and high school students. Events include classroom visits, public workshops, and contributions to community events.

Roundtable discussion on cannabinoid legalization and impact on youth health
Ongwanada Health Centre
Nov. 2016
At the invitation Sophie Kiwala (MPP Kingston and the Islands), I participated in a discussion and the preparation of a report to the Ontario government, providing feedback and recommendations on health issues for youth in response to the pending federal legislation on legalization of cannabis.

Regiopolis-Notre Dame High School, Kingston ON
Science Outreach: International Baccalaureate (IB) program
Sept. 2014-present
Working with graduate students at Queen's University, I set up a series of workshops on research skills that we offer each year to incoming IB students. The goal of these sessions is to provide students with skills and resources that they need to complete an independent research paper, which is part of the IB diploma program.

Community Drug Strategy
Advisory Committee

2016-present

I was invited to be part of a working group on community drug strategy, set up by Dr. Kieran Moore, Associate Medical Office of Health for KFLA Public Health. The team includes experts from a range of disciplines including family medicine, mental health, law, surveillance, education, and the municipal government. Our primary goal is to maintain communication across community sectors that are impacted by both legal and illegal drug use.

Leahurst Charitable Foundation

Board of Directors

2014-present

Leahurst College High School Inc. offers a unique alternative educational experience for intermediate and high school aged students and the Leahurst Charitable Foundation supports both students and the community by helping make this alternative educational experience available to members of the community. The objectives of the corporation are the following: 1. to provide scholarships, bursaries, awards and other forms of financial assistance to qualified students; 2. to provide funding for resources and facilities that support excellence and innovation; and 3. to raise funds in any way to achieve the objectives of the Corporation including accepting donations, gifts, grants, legacies, bequests and inheritances. As a member of the Board of Directors of Leahurst Charitable Foundation, I assess applications for financial assistance to Leahurst College and help to raise funds that are distributed through scholarships and bursaries.

Brain Awareness Day

This is your brain on pain

Memory: How does your brain do it (without you)?

May 2010-present

My lab participated in the annual Brain Awareness Day sponsored by Queen's University. This educational forum for elementary school children provides a hands-on learning experience in neuroscience-related

Canadian Institutes of Health research

Mentorship program

June 2007-present

Each year, I take one student from Queen's University (Faculty of Arts and Science or Faculty of Health Sciences) to participate in this program. The purpose of the mentorship is to familiarize students with the regular duties of academic life. Depending on the student's interest and availability, I meet with them 1-2 times per month during each term. These meetings may involve attending lectures that I teach, attending lab meetings, following a research project from inception to completion by shadowing one of the senior graduate students or learning about various administrative duties that accompany an academic position.

YMCA Kingston Ontario

Dealing with substance abuse

Advisor for program development

Sept. 2007-present

For the last 3 years, I have acted as a consultant for a YMCA program that helps individuals deal with substance abuse issues. This work has included given informal lectures on substance abuse, gambling and eating disorders to counsellors who work with the YMCA community outreach programs. In general, these individuals are not trained in counselling or assessment, so the work largely involves compiling lists of community mental health resources, developing questionnaires and information sheets on substance abuse that individuals can use with their own health care providers and educating the workers on the etiology of substance abuse.

KAIROS Kingston Ontario
Gambling in youth
Advisor for program development
Sept. 2007-present
As a consultant for KAIROS, I advise on program development for youth with gambling disorders. In the past year, the focus of this work has shifted to internet addiction. Recently, I developed a brief assessment tool for identifying internet addiction that is now being used by some of the counsellors at this agency. The same tool was distributed to dons on the Queen's University campus last spring.

PROFESSIONAL AFFILIATIONS*

Association of Women in Science and Engineering (AWISE)
Canadian College of Neuropsychopharmacology (CCNP)
Canadian Society for Brain, Behaviour, and Cognitive Science (CSBBCS)
Canadian Society of Addiction Medicine (CSAM)
Cognitive Neuroscience Society (CNS)
Comparative Cognition Society (CCS)
European Behavioural Pharmacology Society (EBPS)
International Behavioral Neuroscience Society (IBNS)
Society for Neuroscience (SFN)
Southern Ontario Neuroscience Association (SONA)
Women in Neuroscience (WIN)
**Not all memberships are active at any given time.*