Program
And Abstracts

Academic Research Day

DEPARTMENT OF PSYCHIATRY

June 19th, 2014
8:00 a.m. to 4:00 p.m.

Lamplighter Inn
Crystal Ballroom (North)
591 Wellington Rd., South
London, Ontario
At the end of this Academic Research Day, participants will:

1. Have knowledge of research being carried out in the Department of Psychiatry at Western University related to the etiology and treatment of mental disorders
2. Have knowledge of research being carried out in the Department of Psychiatry concerning mental health service delivery
3. Have an appreciation of methodological approaches to, and challenges in, conducting research in psychiatry

At the end of the Keynote Lecture, participants will be able to:

1. Discuss a novel program for helping the homeless mentally ill.
2. Demonstrate understanding of some of the problems involved in implementing a large, pragmatic randomized controlled trial.
3. Identify what the program was and was not able to change in these persons' lives.

This event is an Accredited Group Learning Activity (Section 1) as defined by the Maintenance of Certification program of The Royal College of Physicians and Surgeons of Canada and approved by Continuing Professional Development, Schulich School of Medicine & Dentistry, Western University (5.75 hours.) Each participant should claim only those hours of credit that he/she actually spent participating in the educational program.

In accordance with the requirements for accreditation, 25% of the program will be devoted to audience participation.

THIS PROGRAM HAS NO COMMERCIAL SUPPORT.
PROGRAM

8:00 a.m. Continental Breakfast & Poster Display
(Poster Abstracts Begin on Page 14)

8:30 a.m. Welcome and Opening Remarks
Dr. Paul Links, Chair/Chief, Department of Psychiatry, Western University

8:35 a.m. Introduction
Dr. Marnin Heisel, Director of Research, Department of Psychiatry

ORAL PRESENTATIONS

Presentation Abstracts begin on p. 9.

Morning Sessions

8:40am. Teaching Child and Adolescent Psychiatry to Rural Primary Care Physicians
Espinet, S., McKerlie, A., Steele, M., & Lingard, L.

9:00am Brief Adolescent Suicide Ideation Scale (BASIS)
Grogan, G., Fisman, S., Kizibash, K., Eichstedt, J., Flett, G.L., Eynan, R.,
Collins, K., Singh, D., Jacques, H., Kramer, C., Davidson, B., Bhullar, G.,
& Heisel M.J.H.

9:20am. Long-Term Effects of Adolescent THC Exposure on Adulthood Psychopathology
Renard, J., Loureiro M., Rushlow, W.J., & Laviolette, S.R.

9:40am. Hippocampal Cannabinoid Transmission Modulates Mesolimbic Dopaminergic Neurons Activity: Impact on Opiate Memory Formation and Social Interaction
Loureiro, M., Renard, J., Zunder, J., & Laviolette, S.R.

10:00 a.m. Break and poster viewing (20 minutes)
10:20am.  Is the Emotion Recognition Deficit Associated with Frontotemporal Dementia caused by Selective Inattention to Diagnostic Facial Features?  
Oliver L.D., Virani, K., Finger, E.C., & Mitchell, D.G.V.

10:40am. Glutamatergic Metabolite Correlations with Neuropsychological Tests in First Episode Schizophrenia  
Dempster, K., Norman, R., Théberge, J., Densmore, M., Schaefer, B., Osuch, E., & Williamson, P.

11:00am. Resting Functional Network Connectivity in Schizophrenia and Depression: Investigating Abnormalities in Directed Effort and Emotional Encoding Networks  

Ye, Y., Li, Y., & Norman, R.

11:40am. Clozapine Funding and its Predictors  
Mak M., Pallaveshi, L., & Rudnick, A.

12:00. Lunch (60 minutes)
Posters will remain on display for viewing

Early Afternoon Session

1:00pm. Immigration and Psychosis: An Exploratory Study  
Pallaveshi L., Jwely, A., Subramanian, P., & Rudnick, A.

1:20pm. Meditation versus EEG Alpha Neurofeedback in Anxiety-Stress Reduction: A Randomized Study on Efficacy and Mediating Role of Alpha Power.  
Javan, T., Chow, T., & Frewen, P.

1:40pm. Comorbid Depression and other Predictors of PTSD Severity in Urban Public Transit Employees  
Shah, R., Nisenbaun, R., Classen, C., Eynan, R., & Links, P.S.

2:00pm. An Assessment and Evaluation of London CARES: Facilitating Service Integration through Collaborative Best Practices  
Forchuk, C.

2:20pm. Break and poster viewing (15 minutes)
ACADEMIC LECTURE
INVITED KEYNOTE: DR. DAVID STREINER

“Housing the Homeless Mentally Ill"

By training, Dr. David Streiner is a clinical psychologist. He joined the Department of Psychiatry at McMaster University in 1968, and then became a member of the Department of Clinical Epidemiology & Biostatistics. After 30 years, he retired for one day, and then became the founding Director of the Applied Research Unit and Assistant V.P. of Research at Baycrest Centre, and a Professor in the Psychiatry Department at the University of Toronto. He retired from Baycrest after 11 years, but remains on faculty at both universities. He is also the Senior Scientific Editor of Health Reports, and sits on the editorial boards of four other journals. He has written or edited 9 books, in the areas of statistics, epidemiology, public health, and measurement theory; and has published nearly 400 articles in these and other areas. His main interests are quality of life in people with various medical conditions, woodworking, scale development, woodworking, research design, woodworking, treatment of the homeless mentally ill, and woodworking.

3:55pm. Awards presentation and concluding remarks (Dr. Heisel)
Completion of evaluation forms (All participants)
POSTER PRESENTATIONS

Board #1. An Examination of the Association Between Pain and Family Functioning Using the interRAI Child and Youth Mental Health (ChYMH) Instrument. 
Gallant, N., Arbeau, K., Liu, C., & Stewart, S.

Board #2 Adolescent Opinions on Outpatient Mental Health Recommendations: Challenges and Change. 
Wammes, M., Summerhurst, C., Wrath, A., & Osuch, E.

Board #3 Youth Perspectives on Mental Health Treatment and the Recovery Process: What Helps and What Hinders. 
Summerhurst, C., Wammes, M., Wrath, A., & Osuch, E.

Board #4 Treatment Effectiveness of an Early Identification and Intervention Program for Mood and Anxiety Disorders in Late Adolescents and Young Adults. 
Osuch, E., Summerhurst, C., Wammes, M., & Arcaro, J.

Board #5 Neural Circuitry Underlying Major Depression and Marijuana Use: Resting State fMRI Shows Changes in the Default Mode Network Specific to Depressed Marijuana Users. 

Board #6 Dissociating the Psychoactive Effects of Distinct Marijuana Compounds in the Mesocorticoclimbic Circuitry. 
Zunder, J., Loureiro, M., & Laviolette, S.R.

Board #7 Opiate Exposure State Control: A Molecular Switch in Opiate Reward Memory Formation in the Basolateral Amygdala-Prefrontal Cortical Pathway. 
Rosen, L., Lyons, D., Rushlow, W.J., & Laviolette, S.R.

Board #8 Extra Dimensional Set-Shifting in Rats Using an Operant Conditioning Paradigm: A Measure of Executive Function. 
Desai, S., Allman, B.L., & Rajakumar, R.

Board #9 Emotional Processing Deficits in Family Members of Patients with Frontotemporal Dementia. 
Tavares, T., Mitchell, D.G.V., & Finger, E.

Board #10 Perceived Stress and Mental Health Outcomes of Immigrants and Non-Immigrants in Canada. 
Lapshina, N.

Board #11 Music Therapy for Geriatric Psychiatry Inpatients with Dementia and Behavioural Disturbance: A Pilot Study. 
Thornley, J., Rice, K., & Vasudev, A.
Board #12  Walking the Labyrinth: Considering Mental Health Consumer Experience, Meaning Making and the Illumination of the Sacred in a Forensic Mental Health Setting. 
Heard, C.P., Yeo, S., & Scott, J.

Board #13  Physical Health Monitoring in Patients on a Psychiatric Ward who are Prescribed Atypical Antipsychotics
Tudhope, R., Prakash, A., & Vasudev, K.

Board #14  Factors for a Successful Discharge from Transition into Primary-Care Psychiatry (TIPP)
Tudhope, R., Kaushal, M., Dhir, R., & Takhar, J.

Board #15  Who is in Control? The Physician or the Patient? The Impact of Hospital Guidelines in Reducing Code Yellow Alerts.
Varapravan, S., Subramanian, P., & Pallaveshi, L

Board #16  Psychiatric Rehabilitation Pertaining to Health Care Environments: Facilitating Skills and Supports of People With Mental Illness in Relation to Their Mental and Physical Health Care – Systematic Review.
Pallaveshi, L., Rudnick, A., Zisman-Illani, & Roe, D.

Board #17  Reporting of Standard Research Ethics Procedures in General Psychiatry Peer-Reviewed Empirical Publications
Pallaveshi, L., Subramanian, P., & Rudnick, A.

Board #18  Inter-professional Research Training with a Focus on Cognitive Vitality
Gutmanis, I., & Gibson, M.

Board #19  Research Experience in Psychiatry Residency Programs across Canada: Current Status
Shanmugalingam, A., Ferreria, S.G., Norman, R.M.G., & Vasudev, K.

Board #20  The Prognostic Significance of Early Remission of Positive Symptoms in First Episode Psychosis
Norman, R.M.G., Manchanda, R., & Windell, D

Board #21  Examining and Contrasting the Social Stereotype of Schizophrenia and Depression
Norman, R.M.G., Hampson, E., Sorrentino, R., Ye, Y., & Yixian, L.

Board #22  Glutamatergic Changes Detected Upon Functional Activation with a Stroop Task in Healthy Controls and in Subjects with Schizophrenia.
Taylor, R., Schaefer, B., Neufeld, R., Rajakumar, R., Williamson., P., & Theberge, J.

Board #23  The Relationship Between Insight and Autobiographical Memory for Emotional and Non-emotional Events in Schizophrenia.
MacDougall, A.G., McKinnon, M.C., King, M.J., MacQueen, G.M., & Kiang, M.

Board #24  The 4D-Model of Trauma-related Dissociation: An Empirical Study of a Novel Theoretical Framework
Brown, M., & Frewen, P.
Tzannidakis, N., & Frewen, P.

Board #26  Mindfulness and Metta-based Trauma Therapy (MMTT): Introduction to an Internet Resource for Persons with Trauma and Stressor-Related Disorders.
Roger, N., & Frewen, P.

Board #27  Independent Component Analysis of Self-Referential Processing in Women with Posttraumatic Stress Disorder.
Thornley, E., & Frewen, P.

Board #28  Suicide Prevention Jurisdictional Review for Toronto Public Health
Reiss, L., Eynan, R., Schivone, F.L., Shah, R., & Links, P.S.

Board #29  Testing the Modified Escape Theory of Suicide in an Inpatient Clinical Population
Shah, R., Eynan, R., Heisel, M.J.H., Elfakhani, M., & Links, P.S.
Morning Sessions

Teaching Child and Adolescent Psychiatry to Rural Primary Care Physicians
Stacey D. Espinet, Ann McHerlie, Margaret Steele, & Lorelei Lingard

Continuing medical education can improve the confidence (Fallucco et al., 2010) and capacity of primary care physicians (PCPs) to provide front line mental health care (Steele et al., 2010). We are developing a comprehensive child and youth mental health curriculum to be delivered to rural PCPs across Canada. Here we review findings from our own research and from the peer-reviewed literature that have helped inform the development of this curriculum. We piloted one aspect of the curriculum focused on ADHD and behaviour disorders in Southwestern Ontario (Stretch et al., 2009). Participants completed a pre-/post-training questionnaire asking them to report on their learning needs. We also conducted an extensive review of evidence-based approaches to physician training, in child and youth mental health. Fifty-six PCPs participated and 80% completed the questionnaire. Following training, PCPs indicated an ongoing need for training to address skills (e.g., interviewing, family counseling) rather than knowledge (e.g., diagnostic protocols, prescribing medication), per se. Similarly, findings from the literature indicated a critical need to focus on PCPs’ skills and attitudes to improve PCPs’ practice and patient outcomes (Wissow et al., 2011). These findings have led us to a curricular focus on family-centered interviewing skills and general therapeutic strategies to support the busy PCP in providing, brief, front line treatment for a range of mental health issues. Using a randomized controlled design, we are planning an extensive evaluation of the impact of this educational initiative on physician practice and patient outcomes, which to our knowledge will be the first of its kind in Canada.

Brief Adolescent Suicide Ideation Scale (BASIS)

Suicide is the third leading cause of death among Canadians 10-14 years of age and the second leading cause of death among those 15-19 years of age (Statistics Canada, 2013). There is a need for enhanced suicide risk detection and intervention among adolescents in schools, primary care, emergency and mental health services (Greenfield et al., 2009; Horowitz, Ballard, & Pao, 2009). A review of the literature identified numerous existing tools for assessing suicide risk factors among adolescents; however none appeared sufficient for identifying risk in our local mental health services. The purpose of the present study is thus to develop and initially validate a novel Brief Adolescent Suicide Ideation Scale (BASIS) for use with community and hospital clinical care providers, to enhance suicide risk detection among adolescents 12-18 years of age. Initial items for the BASIS were developed by adapting and revising items from the Geriatric Suicide Ideation Scale (GSIS; Heisel & Flett, 2006), a validated measure developed among older adults. Additional methodological steps include: 1) adapting items and subscales for an adolescent population; 2) inviting expert feedback and item review; 3) convening focus groups with adolescent healthcare professionals; 4) initially testing and requesting feedback from adolescents receiving mental healthcare services; 5) conducting a validation study evaluating the measure’s psychometric properties. Findings will be discussed in the context of clinical implications and research applications of the BASIS for adolescent mental healthcare. This presentation will evaluate the preliminary quantitative and qualitative findings from the expert reviews and focus groups.

Long-Term Effects Of Adolescent Thc Exposure On Adulthood Psychopathology
Justine Renard, Michael Loureiro, Walter J. Rushlow, & Steven R. Laviolette

Marijuana is the most widely used illicit drug among adolescents. Adolescence is characterized by a brain in transition that differs anatomically and neurochemically from that of the adult. These modifications are thought to support the emergence of adult cerebral processes and behaviors. The endocannabinoid system is a central component of these neurodevelopmental changes. This is mainly due to its involvement in the maintenance of the synaptic plasticity. Delta-9-tetrahydrocanabinol (THC), the main psychoactive component of marijuana, acts as a cannabinoid receptor agonist. Therefore, an over activation of the cannabinoid system by THC exposure during adolescence may dramatically alter brain maturation, thereby adult cerebral functions. In the present study, we hypothesize that long-term adolescent chronic THC exposure will disrupt adult rat behaviors and the underlying neuronal functioning related to dysfunctions observed in schizophrenia. To achieve this investigation, our protocol consists to expose adolescent rats (postnatal day (PND) 35 to 45) to THC (i.p. injections). At adulthood (PND75), behavioral tasks, in-vivo electrophysiological recordings and molecular analyses are performed. Our results show that adolescent THC exposure induces long-term alterations in (1) social interactions/recognition; (2) sensorimotor gating; (3) locomotor activity and (4) neuronal DA activity in the ventral tegmental area (VTA). We are currently running molecular analyses in brain areas known to be disrupted in schizophrenia to correlate these changes with neuronal function alterations. This animal model represents an interesting new framework for the study of the long-term consequences of marijuana exposure during adolescence. It might improve our understanding of the emergence of psychotic symptoms.
Hippocampal Cannabinoid Transmission Modulates Mesolimbic Dopaminergic Neurons Activity: Impact on Opiate Memory Formation and Social Interaction
Michael Loureiro, Justine Renard, Jordan Zunder & Steven R. Laviolette

In schizophrenia, social behavior perturbations and the increase use of drugs have been associated with dysfunction of the mesolimbic dopaminergic circuitry. In addition, disturbances in cannabinoid type 1 receptor (CB1R) signaling have been linked to emotional and cognitive deficits characterizing depression and schizophrenia. As a result, there has been a growing interest in clarifying the relationship between the cannabinoid transmission and dopamine (DA)-dependent emotional and cognitive impairments observed in psychiatric diseases. CB1R are highly expressed in the mammalian nervous system, particularly in the hippocampus. Activation of the ventral hippocampal sub-region (vHip; anterior hippocampus in human) is known to increase both the activity of DAergic neurons located in the ventral tegmental area (VTA) and DA levels in reward-related brain regions, particularly in the nucleus accumbens (NAc; ventral striatum in human). Surprisingly, the interplay between hippocampal cannabinoid transmission and VTA-DA neurons activity has never been studied. Therefore, we performed in-vivo recordings in anesthetized rats and found that activation of CB1R in the vHip was able to increase VTA-DA neurons firing activity. Furthermore, by using a conditioned place preference procedure and a social interaction test, our results showed that activation of CB1R in the vHip promotes opiate (morphine)-memory formation and abolishes rats’ natural sociability. Finally, these behavioral effects were prevented by blocking DAergic receptors in the NAc before CB1R activation in the vHip. Collectively, these results provide evidence for the role of hippocampal cannabinoid transmission in the modulation of the mesolimbic DA pathway and behavioral perturbations linked to psychiatric disorders.

Funding resources: supported by NSERC and CIHR grants.
Ethics approvals: All experiments were performed in compliance with the regulations approved by the Canadian Council for Animal Care and the University of Western Ontario Animal Care and Use committee.

Is the Emotion Recognition Deficit Associated With Frontotemporal Dementia Caused by Selective Inattention to Diagnostic Facial Features?
Lindsay D. Oliver, Karim Virani, Elizabeth C. Finger, & Derek G.V. Mitchell

Objectives: Frontotemporal dementia (FTD) is a debilitating neurodegenerative disorder characterized by severely impaired social and emotional behaviour, including emotion recognition deficits. Though fear recognition impairments seen in particular neurological and developmental disorders can be ameliorated by reallocating attention to critical facial features, the possibility that similar benefits can be conferred to patients with FTD has yet to be explored.

Methods: We examined the impact of presenting distinct regions of the face (whole face, eyes-only, and eyes-removed) on the ability to recognize expressions of anger, fear, disgust, and happiness in 24 patients with FTD and 24 healthy controls.

Results: A recognition deficit was demonstrated across emotions by patients with FTD relative to controls. Crucially, the removal of diagnostic facial features resulted in a relative decline in performance for both groups; furthermore, patients with FTD demonstrated a lack of disproportionate improvement in emotion recognition accuracy as a result of isolating critical facial features relative to controls. Patients with FTD also mislabelled negative facial expressions as happy more often than controls, providing further evidence for abnormalities in the representation of positive affect in FTD.

Conclusions: Unlike some neurological and developmental disorders featuring amygdala dysfunction, the emotion recognition deficit observed in FTD is not likely driven by selective inattention to critical facial features. This work suggests that the emotional expression recognition deficit associated with FTD is unlikely to be rectified by adjusting selective attention to diagnostic features, as has proven useful in other select disorders.

This research was supported by funding from the Canadian Institutes of Health Research. All work was approved by the Health Sciences Research Ethics Board at the University of Western Ontario.
Glutamatergic Metabolite Correlations with Neuropsychological Tests in First Episode Schizophrenia
Kara Dempster, Ross Norman, Jean Théberge, Maria Densmore, Betsy Schaefer, Elizabeth Osuch & Peter Williamson

Support acknowledged from grant 12078, Canadian Institute of Health Research.

Background: Increased glutamatergic metabolites have been found in patients with first episode schizophrenia. Although abnormal neuropsychological functioning has been hypothesized to be a core feature of schizophrenia, no studies have examined glutamatergic metabolites and neuropsychological function in drug naive patients. The present study hypothesized that higher levels of 1H-MRS glutamatergic metabolites would be associated with poorer neuropsychological test performance and social functioning at 5-year follow-up in first episode patients.

Methods: Metabolites were collected from the ACC and thalamus prior to treatment and at 10 and 30 months in 16 patients with non-afyective psychosis using 4T 1H-MRS. A neuropsychological test battery was administered at baseline and at one year. Assessment of social functioning was completed at 5-year follow-up.

Results: ACC: glutamate+glutamine at 10 months was associated with Trail B errors (Rho= .738, p=.004). Glutamate at 10 months was associated with worse performance on the WCST (Rho= .911, p=.000). Decrease in glutamate over 10 months correlated with poorer processing speed on Trails A (Rho= -.870, p=.002), WAIS (Rho= .929, p=.003), and worse performance on CPT Beta (Rho= .816, p=.004). Thalamic Decrease in glutamate+glutamine over 10 months was associated with worse performance on the PASAT (Rho= -.833, p=.005). Thalamic glutamate at 10 months was negatively associated with the SOFAS score at 5-years (Rho=-.641, p=.063).

Conclusion: Glutamatergic metabolites were associated with neuropsychological test deficits at baseline and one year as well as impaired social functioning at 5-year follow-up in patients with first episode psychosis.

Resting Functional Network Connectivity in Schizophrenia and Depression: Investigating abnormalities in directed effort and emotional encoding networks

Background: There is growing interest in intrinsic (resting state) network connectivity in the brain, particularly where abnormalities in brain networks may underlie disease states such as schizophrenia (SZ) and depression (MDD). Here we utilized fMRI to examine functional networks of brain activation in SZ, MDD and healthy controls to isolate disease specific patterns. We hypothesize intrinsic network abnormalities will be present in regions associated with directed effort in SZ and in regions associated with emotional encoding in MDD, providing support to the hypothesis that SZ is a failure of the directed effort network while depression and bipolar disorders may be a failure of the emotional encoding network.

Methods: A 10 min resting state functional MRI series (3T) was collected from 72 subjects (24 SZ, 24 MDD and 24 matched healthy volunteers). Standard pre-processing steps were performed using SPM8, all data were band-pass filtered (0.012-0.1 Hz) and a seed-based connectivity analysis using the medial prefrontal cortex (mPFC) as a seed region was performed. The resulting functional network for each subject was extracted and we then examined these networks within and between groups to isolate differences.

Results and Conclusions: Preliminary analysis has identified significant decreases in the functional connectivity between the mPFC and a number of brain regions including the posterior cingulate/precuneus and fusiform gyrus in SZ. These findings offer early support for the hypothesis that SZ is related to failure of the directed effort network. Further analysis will investigate the differential role of the emotional encoding network in MDD.

Can Informational Videos Reduce Stigma towards Schizophrenia? It Depends on the Content
Yang Ye, Yixian Li, & Ross Norman

Objectives: To examine how different types of informational videos influence audiences’ implicit and explicit stigmas and evaluations with regard to schizophrenia.

Methods: Two-hundred-and-thirty-nine participants were randomly assigned to three groups. In the two experimental groups, participants were asked to watch a video and complete a package of measures. In the symptoms-focused video, a person discussed his diagnosis of schizophrenia and acute symptoms. In the recovery-focused video, the same person discussed his diagnosis and recovery. In the control group, participants completed measures without watching a video.

Assessments included measures of implicit stigma and automatic evaluation, and several explicit self-report measures of impressions and behavioural intentions. Supplementary measures were also included. The order of the indirect and self-report measures was counter-balanced between participants.

Results: Participants who watched the recovery-focused video indicated lower levels of implicit stigma and more positive automatic evaluations towards Andrew than those who watched the symptom-focused video and the control group. Similarly, those who watched the recovery-focused video reported more positive impressions and behavioural intentions towards both Andrew and people with schizophrenia in general. However, those who watched the symptom-focused video and those in the control group. No differences were found between the latter two groups.

Conclusions: Videos about recovery tend to be more effective than videos about symptoms in reducing stigma and improve attitudes towards people who have been diagnosed and with and treated for schizophrenia. The findings have implications for future intervention programs aimed towards reducing the public's stigmas towards mental illness.

Note: Ethics approval was received from NMREB (#104415) of Western University and funding was provided by the Social Science and Humanities Research Council of Canada (Grant # 169462).
Clozapine funding and its predictors
M. Mak, L. Pallaveshi, & A. Rudnick

Introduction: Clozapine is funded publicly in Ontario based on regional coordinators’ decisions. We described the diagnostic distribution of clozapine funding requests and approvals in Southwestern Ontario and tested for predictors of approval.

Methods: We conducted a retrospective chart review on all 1,268 clozapine funding requests to the Southwestern Ontario clozapine regional funding coordinator during 1992-2011. The primary outcome was clozapine funding approval or not. Demographic and clinical parameters were described. Bivariate and multivariate analysis was conducted.

Results: Of the 1,268 clozapine applications reviewed, 1224 (96.5%) were approved and 44 (3.5%) were not. A significant direct correlation was found between clozapine approval and: year of application (p<0.01), number of current antipsychotic medications (p <0.01), and length of cumulative psychiatric hospitalization (p <0.05). A significant inverse correlation was found between clozapine approval and: primary diagnosis (p < 0.05), number of past antipsychotic medications (p <0.01), history of agranulocytosis/neutropenia (p<0.01), and parkinsonism (p <0.05). In logistic regression, number of past antipsychotic medications (p<0.01) and severity of positive symptoms (p<0.01) were the strongest predictors of clozapine approval events.

Conclusion: Some findings were counter-intuitive, such as more past antipsychotic medications predicting less clozapine funding approval.

Relevance/Implications: More research on clozapine-related policy and practice is needed.

Early Afternoon Sessions

Immigration and Psychosis: An exploratory study
L. Pallaveshi, A. Jwely, P. Subramanian & A. Rudnick

Background: This qualitative study aimed to understand views (and related experiences) about immigration and its relation to psychosis, such as schizophrenia, as viewed by their mental health care providers.

Methods: The study used a phenomenological approach to evaluate views of 12 mental health care providers (MHCP) that are informed by their lived experience (as providers of mental health care to immigrants with psychosis). The semi-structured interview data were coded and thematically analyzed.

Results: We found 6 themes related to the experience of mental health care providers in relation to immigrants who have psychosis: immigration process, service availability and accessibility, social health determinants, cultural context, psychosocial stressors, and enablers and facilitators of recovery. The most prominent challenges/barriers that mental health care providers encountered while working with immigrants with psychosis were related to cultural context, language, and social and health services and support. The majority of MHCPs believed that 70% of first episodes of psychosis of immigrants occur after the process of immigration and that most of them either did not have or were not diagnosed with psychosis prior to immigration.

Conclusion: Results demonstrated system challenges and related opportunities for service provision for immigrants with psychosis. We highlighted important areas for intervention to reduce disparities for immigrants with psychosis in their use of social and health care. Further research is needed in relation to immigration of people with psychosis, particularly in relation to their responses to receiving communities and how to support their integration with a person-centered and culturally safe approach.

Relevance/Implications: More research is needed in relation to immigration of people with psychosis, particularly in relation to their responses in receiving communities and how to support their integration with a person-centered and culturally safe approach.

Meditation versus EEG Alpha Neurofeedback in Anxiety-Stress Reduction: A randomized study on efficacy and mediating role of alpha power.
Tanaz Javan, Theodore Chow, & Paul Frewen

Mindfulness meditation (MM) and EEG alpha neurofeedback (NFB) are efficacious therapies for improving mood, attentional control, and self-referential processing. Research suggests that a common neurophysiological mechanism through which MM and NFB effect these cognitive-emotion outcomes is through the plastic regulation of the EEG-alpha oscillation (8-12Hz), globally and across frontoparietal sites. However, the relative efficacy of MM and NFB for improving cognition and mood has not been directly compared. Moreover, studies have not compared the relative efficacy of MM and NFB on increasing EEG-alpha power or, by extension, the degree to which EEG-alpha power increases mediate anxiety-stress symptom reduction between interventions. 80 university undergraduates were randomized to one of four groups, each receiving 15-minutes of their respective therapies: 1) MM, 2) NFB alpha-up, 3) NFB-alpha-down, 4) NFB-sham. Subjective outcomes using the Profile of Mood States indicated overall improvements in distinct mood states associated with NFB alpha amplitude suppression. Specifically, scores on tension and confusion categories were lower in this group relative to others. Objective outcomes were measured through EEG and standardized neurocognitive tests of attention (Stroop task) and self-referential processing (Visual Verbal Self Other Referential Processing Task). The NFB-alpha up group showed a non-significant trend towards better performance through reduced errors and decreased response reaction times, relative to MM. Therapy effects on EEG-alpha modulation and subsequent correlations with emotion-cognitive outcomes will be discussed. Since NFB is a therapy directly modulating the EEG-alpha oscillation, we expect the proportion of the mediating effect of EEG-alpha change on cognitive-emotion outcomes will be greater in NFB than in MM.
Comorbid Depression and other predictors of PTSD Severity in Urban Public Transit Employees
Ravi Shah, Rosane Nisenbaum, Catherine Classen, Rahel Eynan, & Paul S. Links

Introduction: Experiencing a traumatic event is a common occurrence in our society. Approximately 50-90% of people encounter at least one traumatic event in their lifetime. The majority of people exposed to a traumatic event will recover and not suffer further psychological difficulties, but 8-12% will go on to develop post-traumatic stress disorder (PTSD).

Purpose: To determine whether PTSD with Major Depressive Disorder (MDD) among urban public transit employees who were exposed to a workplace traumatic event is associated with greater PTSD severity over the six-month follow-up period compared to PTSD without MDD, and also to identify predictors of PTSD severity among these employees.

Methods: This study utilized data that was collected prospectively from the Acute Psychological Trauma (APT) study participants. Information about Axis-I diagnosis and PTSD severity were collected from the SCID-I and the Modified PTSD Symptom Scale respectively. The two groups (PTSD without MDD and PTSD with MDD) were compared using Chi-squared test and T-test for categorical and continuous variables respectively. Multivariate linear mixed model analysis was conducted to identify predictors of PTSD severity over the six-month follow up period.

Results: PTSD without MDD (N=29) and PTSD with MDD (N=37) groups were not significantly different in terms of PTSD severity. The severity of depression (p=0.01), female (p=0.01), non-Caucasian (p=0.01), perceived high workplace related stress (p=0.02), and history of lifetime trauma (p=0.01) were significantly associated with higher PTSD severity after controlling other variables.

Conclusion: This study highlights the importance of modifiable variables (severity of depression, workplace related stress and traumatic events) for reducing PTSD severity after a workplace traumatic event in urban public transit employees.

An Assessment and Evaluation of London CAReS: Facilitating service integration through collaborative best practices
Cheryl Forchuk

Study Objectives: London CAReS is a municipal strategy aimed at improving health and housing outcomes of individuals experiencing persistent and chronic homelessness. These individuals live with challenges of addiction, mental health and poverty. The purpose of this evaluation was to evaluate individual London CAReS participant outcomes, and to examine community implementation of London CAReS.

Methods: A sequential mixed methods research design with a participatory action research approach was used. Researcher-led interviews were conducted with a retained sample of 56 London CAReS participants. Focus groups were held with London CAReS participants, staff and key stakeholders. Shelter bed and health care utilization data were collected to compare year prior to London CAReS involvement to year after.

Results: Key findings indicate a significant increase in participant's time spent in housing, and a decrease in shelter stays since receiving support from London CAReS. Focus group analysis suggests London CAReS is supporting diversion away from police services and emergency response, and promoting community primary health care.

Conclusion: Participants were supported using housing first and harm reduction strategies to address homelessness and substance use issues. The importance of collaborative inter-agency approaches was essential to the meet the diversity of needs.

Implications: This evidence is critical in providing other communities information on the development and sustainability of a municipal evidence-based collaborative strategy to address, reduce and prevent homelessness.

Ethics Approval: Ethics approval obtained from the University Of Western Ontario Research Ethics Board.
POSTER DISPLAYS

Child and Adolescent Mental Healthcare

Board #1
An Examination of the Association Between Pain and Family Functioning Using the interRAI Child and Youth Mental Health (ChYMH) Instrument
Natasha Gallant, Kim Arbeau, Chenyu Liu, & Shannon L. Stewart

Introduction: Research has demonstrated an association between pain and family functioning in children and youth (Asmundson et al., 2012; Palermo & Chambers, 2005). Families of children with chronic pain conditions tend to have lower levels of family functioning (Lewandowski et al., 2010). Most previous pain research with children and youth has focused on samples receiving medical services for specific types of pain and/or health conditions. However, there is considerably less research investigating the influence of parenting and family variables on pain in children and youth receiving mental health services.

Methods: In the current study there were n=351 children and youth 4-18-years-old (M=10.9, SD=3.4) admitted to eight mental health agencies in Ontario, Canada. Data was collected using the interRAI Child and Youth Mental Health (ChYMH) instrument. The following variables were included: pain frequency, pain intensity, family functioning, caregiver wellbeing, and parenting strengths.

Results: Analyses were conducted using Kruskal-Wallis analyses. Among the results, differences in pain intensity were found for family functioning (x²(4) = 19.64, p <0.01), caregiver wellbeing (x²(4) = 10.60, p <0.05), and parenting strengths (x²(4) = 15.04, p <0.01). Follow-up tests revealed children/youth who experienced moderate levels of pain had lower levels of family functioning, caregiver wellbeing, and parental strengths.

Conclusions: The present study adds to the growing literature on the impact of the family on juvenile pain by focusing on children and youth primarily receiving mental health services. The results demonstrate the importance of examining parental and family indicators when developing pain management interventions for children and youth.

Learning Objectives:
Recognize the importance of psychosocial factors in child and youth experiences of pain.
Gain knowledge of specific parent and family factors for clinicians to consider in developing pain management interventions for children and youth.
Introduce the interRAI Child and Youth Mental Health (ChYMH) instrument and its clinical utility in both assessment and treatment.

Board #2
Adolescent Opinions On Outpatient Mental Health Recommendations: Challenges and Change
Michael Wammes, Carolyn Summerhurst, Andrew Wrath & Elizabeth Osuch

Purpose: To explore youth perceptions on what they would have done differently about their treatment and reasons for not following through with treatment recommendations, when they did not.

Methods: Youth seeking treatment at the First Episode Mood and Anxiety Program (FEMAP) between 2009 and 2012 were recruited to complete a follow up questionnaire regarding their treatment experiences approximately three months after their initial assessment. Their responses were analyzed qualitatively for emerging themes.

Results: When asked what they would do differently about their treatment, patients primarily indicated that they would have gotten help sooner, been more consistent or persistent, taken medication, and communicated better with treatment providers. Participants provided 9 common reasons for not following through with treatment recommendations: too busy, systemic communication issues, not happy with referred services, did not need it, found other services independently, financial concerns, medication resistance, issues with therapeutic relationship, and anxiety symptoms.

Conclusion: Overwhelmingly, participants stated that they would have gotten help sooner, been more consistent and been more open to different forms of treatment. Reasons for not following through were usually related to personal reasons such as being too busy, moving, or deciding they did not need services, but there were also systemic communication issues implicated in lack of follow-through.

Implications and Contribution: The results of this study offer valuable insights into barriers between youth and treatment, and what they would have done differently in retrospect about their treatment. These insights can inform future policies and procedures.
Board #3
Youth perspectives on mental health treatment and the recovery process: What helps and what hinders.
Carolyn Summerhurst, Michael Wammes, Andrew Wrath, & Elizabeth Osuch

Purpose: To investigate adolescent perceptions of what is most helpful and most challenging about mental health treatment and the recovery process for mood and/or anxiety disorders.

Methods: Clients seeking treatment at the First Episode Mood and Anxiety Program (FEMAP) between 2009 and 2012 were recruited to participate in a follow-up survey about their experience accessing mental health services. Responses to two open ended questions were analyzed for emerging themes.

Results: The most commonly reported themes identified by youth as being helpful to their treatment and recovery process were talking about problems, "therapy", medication, support, and mental health education. The most commonly reported themes identified as challenges to recovery included: symptom management, personal accountability, talking about issues, accessing services and accepting illness.

Conclusion: Youth identified the need to talk to a non-judgmental clinician who could provide education, support and coping skills. These youth also acknowledged their need for access to medication and treatment that is appropriate and timely. Participants reported that some of the most helpful aspects of treatment and recovery (medication and talking) could also be the most challenging. Youth were able to identify the role they play in the mental health recovery process as well as the importance of support and non-judgment from treatment providers.

Implications and Contribution: The results of this research have important practice and policy implications for providing mental health treatment to youth with mood and/or anxiety disorders, which is an emerging priority for many industrialized countries today.

Board #4
Treatment Effectiveness of an Early Identification and Intervention Program for Mood and Anxiety Disorders in Late Adolescents and Young Adults
Elizabeth Osuch, Carolyn Summerhurst, Michael Wammes, & Justin Arcaro

Purpose: The goals of this ongoing study are to identify the extent to which youth within the First Episode Mood and Anxiety Program (FEMAP) clinical care delivery model: 1) have a reduction of symptoms; 2) are satisfied with their treatment; and, 3) have a reduction in functional impairment as a result of treatment.

Methods: Repeated measures were used prospectively at intake and before the onset of treatment and included symptom surveys, satisfaction surveys and questionnaires about functioning. Participants were asked to repeat symptom and function measures at two and four-month post-onset of treatment. Satisfaction with health care services was evaluated at the time of entry and at the final time-point.

Results: For the first 35 subjects who completed the study, mean level of anxiety was significantly reduced between onset of treatment and two-month follow-up. Mean depression rating difference between intake and two and four-month follow-up was also significantly lower. Work and/or school functioning, social functioning, and family functioning of the youth were significantly improved across time. The ratings of total number of days per week not functioning at school/work and days with impaired functioning due to mental health symptoms showed statistically significant improvement over time. Patient satisfaction was high at the 2-month follow-up time point.

Implications and Contribution: This research illustrates the effectiveness and impact of an easily accessible treatment program for youth age 16-25 experiencing the onset of a mood or anxiety disorder, a population for which there are large gaps in mental health care services.
Neurological/Biological Bases of Behaviour

Board #5
Neural Circuitry Underlying Major Depression and Marijuana use: Resting-state fMRI Shows Changes in the Default Mode Network Specific to Depressed Marijuana Users
Kristen A. Ford, Justin Arcaro, R. W. J. Neufeld, Derek Mitchel, Jean Théberge, Peter Williamson, & Elizabeth Osuch

Background: The relationship between depression and marijuana use is complex and poorly understood. Impairments in the brain’s motivational system by substance abuse may produce a deficit state in neurocircuitry involved in reward processing and thus contribute to depression. Here we have utilized resting-state fMRI to examine functional networks in healthy controls (HC), depressed patients (MDD), frequent marijuana users (MJ), and depressed frequent marijuana users (MDD-MJ).

Methods: 70 participants (19 HC, 17 MDD, 18 MJ, 16 MDD-MJ) completed a 6 min resting-state fMRI scan (TR=3s, 3.0T MRI). Frequent MJ use was ≥4 times per week for at least three months preceding study; non-significant use was ≤4 days per month for the past year. Standard pre-processing steps were performed and a seed-based connectivity analysis using the posterior cingulate cortex was performed to identify the default mode network (DMN). We examined the DMN within and between groups.

Results: We identified significant group differences in the DMN (F=7.3 \(p<0.05\) (FDR)). Post hoc comparisons showed differences between MDD and MDD-MJ groups with the latter having significantly less connectivity to anterior cingulate cortex (BA 25), caudate, superior temporal gyrus (BA 22), and claustrum extending into putamen (\(T=4.25 \, p<0.05\) (FDR)).

Conclusions: Results show decreased activation in DMN specific to depressed frequent MJ users. This supports the suggestion that frequent MJ use, when combined with depression, produces a deficit in some of the neurocircuitry involved in reward processing in ways that are absent with either frequent marijuana use or depression alone.

Board #6
Dissociating The Psychoactive Effects Of Distinct Marijuana Compounds In The Mesocorticolimbic Circuitry
Jordan Zunder, Michael Loureiro & Steven R. Laviolette

A growing body of evidence supports the link between heavy marijuana exposure and an increased risk of developing schizophrenia-related psychoses. However, marijuana smoke represents a complex mixture of chemical components, possessing dissociable psychoactive properties. Indeed, emerging clinical evidence suggests a functional dissociation between the two main pharmacological components of cannabis, cannabidiol (CBD) and Δ9-tetrahydrocannabinol (THC). Clinical imaging evidence suggests that THC and CBD may exert differential psychoactive effects in distinct mesocorticolimbic substrates. In the prefrontal cortical and amygdalar regions, CBD has been shown to be a weak antagonist of CB1 receptors. In contrast, THC acts as a partial CB1 agonist. Our previous work has shown that modulation of CB1 transmission in the BLA>mPFC pathway can mediate the emotional valence of an associative fear memory. Our current objective is to examine the roles of CBD vs. THC in mediating emotional learning and memory formation.

Our results suggest that CBD has rewarding properties in the nucleus accumbens shell (NASH) and blocks the formation of fear memory to a salient footshock, mediated through a serotonergic-dependent mechanism. In contrast, THC potentiates non-salient fear memory formation to a sub-threshold footshock through a dopamine-dependent mechanism. We report evidence of a rostrocaudal hedonic gradient in the NASH that is sensitive to THC. In vivo electrophysiology results suggest a complex interplay between DAergic and GABAergic signaling in the VTA, which may account for our results. Our results have implications for numerous neuropsychiatric disorders such as schizophrenia, addiction and PTSD. The Canadian Council for Animal Care approved all methods.
Board #7
Opiate Exposure State Control a Molecular Switch un Opiate Reward Memory Formation in the Basolateral Amygdala-Prefrontal Cortical Pathway
Laura G. Rosen, Danika Lyons, Walter J. Rushlow, & Steven R. Laviolette

The potent rewarding effects of opiate class drugs facilitate the formation of strong associative memories linked to the drug-taking experience that can trigger relapse. These opiate reward memories are encoded in the basolateral amygdala (BLA) and medial prefrontal cortex (mPFC) along a temporal gradient. Intra-BLA processing of opiate-related reward memories is mediated by dopamine D1 receptor (D1R) and D2 receptor (D2R) signaling as a function of opiate exposure state, where D1Rs are required for acute memory formation in the drug-naïve state, but D2Rs are necessary for memory formation during opiate dependence and withdrawal. Links between D1R and ERK 1/2 and between D2R and CaMKIIα suggest these signaling molecules may underlie the state-dependent opiate memory formation switch. Using a place conditioning procedure paired with targeted microinfusions, we show that associative memories are processed in the BLA via an ERK-dependent mechanism in the opiate-naïve state, but via a CaMKIIα-dependent mechanism during opiate dependence and withdrawal. Interestingly, intra-mPFC memory acquisition requires CaMKIIα signaling in the drug-naïve state, but not ERK1/2 in either opiate exposure state. Western blots revealed reduced ERK1/2 and CaMKIIα expression in BLA, but increased CaMKIIα and ERK1/2 in the mPFC, thus demonstrating a functional interaction between BLA and mPFC during the processing of opiate-related associative memories during the switch from the non-dependent to dependent/withdrawn opiate exposure states. Understanding the mechanisms of associative opiate memory formation will ultimately help to identify potential pharmacological targets for preventing these powerful memories from triggering relapse in those recovering from addiction.

Board #8
Extra Dimensional Set-Shifting In Rats Using An Operant Conditioning Paradigm: A Measure Of Executive Function
Sagar J. Desai, Brian L. Allman & Raj Rajakumar

Deficits in executive function is a core symptom of a number neuropsychiatric conditions, including schizophrenia and autism. Modelling psychiatric symptoms in rodents is important for the discovery of novel therapeutic strategies in the management of these disorders. We present here, an operant conditioning-based paradigm to assess extra-dimensional set-shifting in rats in our laboratory. Set-shifting requires an ability to modify the ongoing behavior in response to a change in strategies to achieve the goal, and is assessed in clinics using the Wisconsin card sorting test. In an ongoing study, a putative rat model of schizophrenia made by neonatal ablation of prefrontal cortical subplate (Rajakumar et al., 2004) is used. The set-shifting task requires rats to learn visual-cue discrimination, and then, shift to a response discrimination strategy to obtain a reinforcer (sucrose pellet). Our preliminary results show that sham-control rats take ~75 trials to reach the successful performance criterion in the set-shifting task. We predict that subplate lesioned rats will require a greater number of trials than the control rats to reach the performance criterion. We will further optimize the protocol by subjecting known animal models with deficits in prefrontal cortical executive function such as following microinfusions of GABA and/or glutamate antagonists into the prefrontal cortex of awake animals. Our overall goal is to validate this testing paradigm to assess extra-dimensional set-shifting in rats with specificity, reliability and efficiency, and apply the paradigm in animal models of neuropsychiatric disorders.

Board #9
Emotional Processing Deficits in Family Members of Patients with Frontotemporal Dementia
Tamara P Tavares, Derek GV Mitchell, & Elizabeth Finger

Frontotemporal dementia (FTD) is a neurodegenerative disorder characterized by early behavioural impairments such as loss of empathy, emotional blunting and deficits in emotion recognition. Currently, the tools used to diagnose FTD are not sensitive to detect patients during the early course of the disorder. Thus, there is an urgent need to develop new diagnostic tools in order to detect patients early. Considering that deficits in emotional processing and protein levels occur early, related tasks may be valuable untapped tools that can facilitate earlier diagnosis in pre-symptomatic individuals. The present study will use the combination of functional neuroimaging during an emotional processing task and protein biomarkers to determine whether abnormalities are present in pre-symptomatic family members of patients with FTD. Participants will complete an fMRI scan during an emotional processing task, and undergo neuropsychological tests as well as blood and cerebrospinal fluid collection. We hypothesize that family members will show neural deficits during the emotional processing task and abnormal patterns of protein biomarkers that parallels the abnormalities in FTD. Currently, we are recruiting participants (current n = 19) and conducting preliminary analyses. Upon completion of this study, we will have determined abnormalities in neural activation and protein biomarkers prior to symptom onset. This approach may be applied to establish new tools for diagnosing and tracking disease progression.
Board #10

Perceived Stress and Mental Health Outcomes of Immigrants and Non-Immigrants in Canada

Natalia Lapshina

Objectives and Hypotheses: The study examined effects of immigrant status, socio-demographics and area of residence on mental health outcomes. I expected that recent immigrants would report better well-being and mental health than non-immigrants ("healthy immigrant effect") and that these effects would vary by area of residence.

Data and Method: I used the Canadian Community Health Survey conducted in 2007-2008 by Statistics Canada. The survey gathered health-related data from 131,061 respondents with information at the sub-provincial levels of geography. I used hierarchical logistic regression and ANOVA models to predict the levels of depression, distress, and the chances of seriously considering suicide in the last 12 months and whether they consulted a mental health professional, controlling for demographics and socio-economic status. The models included immigrant status (recent vs. established vs. non-immigrant) and province of residence as predictors.

Results: The findings partially supported the hypotheses. Recent immigrants reported lower levels of depression than established immigrants and non-immigrants; this pattern varied depending on province of residence. Levels of distress did not differ between immigrants and non-immigrants. At the same time, recent and established immigrants were more likely than non-immigrants to seriously consider suicide in the past twelve months. Both immigrant groups were less likely to consult a mental health professional for their condition.

Conclusions and future directions: The study demonstrates importance of non-medical factors contributing to mental health of patients, namely immigrant status and province of residence. In my future research, I will explore immigrants’ attitudes toward formal and informal sources of help for mental health issues and predictors of their help-seeking behaviour.

Board #11

Music Therapy for Geriatric Psychiatry Inpatients with Dementia and Behavioural Disturbance: A Pilot Study

Joanna Thornley, Kristina Rice, & Akshya Vasudev

Background: Music therapy seems to offer benefit for some individuals with dementia in Long-Term-Care facilities. However, little is known about efficacy of this therapy in an acute inpatient psychiatric setting for patients diagnosed with dementia.

Objective: To investigate the feasibility and efficacy of Music Therapy (MT) versus Active Engagement Intervention (AEI) in patients admitted with dementia.

Methodology: This is a convenience sample study being conducted at LHSC-VH. All admitted patients with dementia would be eligible for participation with a score of <=13 on the Mini Mental State Examination, >=2 on the Clinical Dementia Rating scale, >=3 on distressing behaviours from the Neuropsychiatric Inventory-Clinician version (NPI-C), and a summative score of >=45 on the Cohen-Mansfield Agitation Inventory (CMAI). Participants are excluded if they are younger than 50 years. A trained rater, blinded to the intervention, will complete the NPI-C and the CMAI. Behaviour ratings will be collected at baseline and once weekly over eight sessions. Participants will be randomized to either the MT treatment group or the AEI. An accredited music therapist will play 1 hour of music to elicit relaxation through active and receptive engagement; a social worker will offer various engagement interventions to the other arm.

Conclusion: To date, a total of 15 participants have been recruited, 9 have been randomized to MT and 6 to AEI. We will present preliminary data gathered so far. We expect that MT is feasible and will lead to a significant reduction in behavioural disturbance in participants receiving MT compared to AEI.

Board #12

Walking the Labyrinth: Considering Mental Health Consumer Experience, Meaning Making and the Illumination of the Sacred in a Forensic Mental Health Setting

C. Heard, S. Yeo, & J. Scott.

Objectives: The purpose of this study is to examine the meaning and experience associated with participating in the 'Walking the Labyrinth' program, as facilitated by Spiritual Care professionals at the Southwest Centre for Forensic Mental Health Care. Within this program, clients use a purpose built stone constructed eleven circuit Chartress Labyrinth in an outdoor courtyard.

Methods: Using a qualitative phenomenological methodology, consistent with interpretative phenomenological analysis, this study examines the experience, meaning and relevance of such participation. Data was collected through the completion of semistructured interviews with 12 consumer participants residing at the Southwest Centre for Forensic Mental Health Care. This collected data was transcribed verbatim and coded for themes by multiple coders. Several methods were employed to establish trustworthiness.

Results: Participation in the 'Walking the Labyrinth Program' supported feelings of relaxation, peace, accomplishment, escape, spiritual connectedness and enabled meaning making.

Conclusions: It appears evident that participation in the 'Walking the Labyrinth' program markedly impacts participants. This therapeutic tool offers convenience, ease of use for consumers and clinicians and can be accessed in a timely immediate manner, if indicated. Recommendations for supporting application of this novel approach to spiritual care and wellness are considered for psychiatric, general health and community care settings.
Hospital and Community Mental Healthcare

Board #13
Physical Health Monitoring in Patients on a Psychiatric Ward who are Prescribed Atypical Antipsychotics.
R. Tudhope, A. Prakash, & K. Vasudev

**Background:** Increased use of atypical antipsychotics heightens the risk of metabolic side effects in a population already at elevated risk of cardiovascular disease. While guidelines exist to direct health monitoring, studies show sub-optimal screening and treatment for metabolic effects. We, therefore, aimed to assess the prevalence of physical health monitoring in patients receiving antipsychotics on the psychiatric ward.

**Methods:** A clinical audit tool was designed to capture necessary monitoring parameters based on national guidelines. Retrospective review of patients discharged from the LHSC psychiatry ward between January and March 2012 was conducted and patients prescribed atypical antipsychotics routinely for more than three days were assessed to determine if parameters were measured within a year of admission.

**Results:** 96 (62%) patients were prescribed atypical antipsychotics out of a total of 157 charts reviewed. Height and weight were measured in 73%, although none had a BMI calculated or waist circumference measured. After calculating BMI, 24% were in the obese range and 23% were considered overweight. Only 31% and 36% of patients had fasting glucose and lipids measured, respectively. 10% had an abnormal glucose and 63% had at least one abnormal lipid parameter. Only 25% with an abnormal value had action taken to address this, typically a medicine consult or dietary change. Overall, only 25% had mention of physical health follow-up by the family physician at discharge.

**Conclusions:** Patients prescribed atypical antipsychotics on the psychiatric ward are inadequately monitored for physical health. Looking forward, we aim to introduce a physical health monitoring checklist in the patients’ record and evaluate this quality improvement program.

Board #14
Factors for a Successful Discharge from Transition into Primary-Care Psychiatry (TIPP)

**Background:** The Transition into Primary-care Psychiatry (TIPP) model based out of RMHCL ensures patients receive coordinated services based on the underlying principles of client-centered care. There is paucity of literature in the area of what factors make these models successful. Therefore, the aim of this study was to identify potential factors contributing to the successful transition of patients from a tertiary mental health care team into primary practice.

**Method:** A literature review was conducted to delineate factors that bode a successful transition to primary care from secondary care service. Based on this search a tool was developed consisting of 10 factors frequently thought to play a role in most studies reviewed. This tool was used to conduct chart audits on 59 patients that had been transitioned, in anticipation that useful predictors for successful discharge or potential barriers to discharge could be identified.

**Results:** Between July 2008 and April 2013, 59 patients were transitioned from the TIPP program. Of those 59 patients, 49 (83%) were successfully discharged to primary care, while the remaining 10 (17%) patients required a return to tertiary ambulatory care services and were considered an unsuccessful discharge.

**Conclusions:** Characteristics of patients successfully transitioned from TIPP into primary practice revealed a positive association with higher GAF scores, overall insight, motivation, compliance and social supports while, the presence of substance abuse, medical co-morbidities and community supports did not appear to differ amongst the two groups.
Board #15
Who is in Control - The Physician or the Patient? The Impact of Hospital Guidelines in Reducing Code Yellow Alerts
Sreelatha Varapravan, Priya Subramanian & Luljeta Pallaveshi

Purpose: Unauthorized leave of absences by psychiatric inpatients is associated with risk of harm to self or others, and creates considerable emotional and tangible burdens for staff. On August 1st 2013, RMHC-L hospital implemented pass level guidelines on all inpatient units except adolescent and forensic units. This pilot study aims, (1) to examine whether the implementation of the pass guideline is effective in reducing code yellow alerts; (2) to identify any predictor variables that are associated with code yellow for patients who are at high risk and (3) to determine the patients’, frontline and management staff’s views about the appropriateness and effectiveness of the pass guideline.

Methods: A mixed methodology will be used to analyse both qualitative and quantitative data.
Qualitative: A phenomenological methodology informs qualitative data collection and analysis. 3 focus group interviews from different perspectives (patients, front line staff, management) will be conducted assessing strengths, weaknesses, challenges in use of guideline. The interview recordings will be transcribed verbatim and validated; comparative thematic analysis (Boyatzis, 1998) conducted and conceptual relationships between core thematic codes explored.
Quantitative: Data on patient demographic characteristics and number of code yellow alerts will be collected from chart reviews for two periods, August 2012 - February 2013 and August 2013 - February 2014. Chi-square (χ2) and Pearson Correlation Coefficient tests will be used to examine differences and associations between variables, before and after the implementation of guideline. Logistic regression analysis will be performed to determine association between predictor variables (demographic characteristics) and outcome variables (code yellow)

Results: Not available.

Conclusions: It is anticipated that the study will provide evidence to make recommendations for strategic quality improvement in managing patient safety in hospital settings.
Expected Outcomes: A reduction in code yellow alerts is expected, which in turn will promote patient's sense of autonomy and personal responsibility during their recovery and care. We will also develop practice guidelines that can be used in other mental health care settings. As well, we expect a reduction of the human and economic burden.

Board #16
Psychiatric Rehabilitation Pertaining to Health Care Environments: Facilitating Skills and Supports of People with Mental Illness in Relation to their Mental and Physical Health Care – Systematic Review
L. Pallaveshi, A. Rudnick, Y. Zisman-Illani, & D. Roe

Background: Psychiatric/psychosocial rehabilitation (PSR) aims to facilitate the recovery of people with serious mental illness (SMI), and consists of enhancing and maintaining adaptive skills and supports of people with SMI so that they can be satisfied and successful in their environments of choice. The objective of our paper is to review PSR in relation to various health care environments, specifically in relation to mental, substance use-related, physical (medical and dental), and complementary and alternative medicine (CAM) health care environments. The primary questions we posed for this review are: 1. What are PSR and related practices regarding these health care environments? 2. What are PSR outcomes regarding these health care environments? 3. What are predictors of these outcomes?

Methods: Data collection consisted of a systematic review of PSR in relation to these health care environments. Data analysis consisted of a narrative review (a meta-analysis was not conducted due to the wide diversity of PSR practices and outcome measures found).

Results: PSR is effective in relation to mental health care environments and is promising in relation to substance use related and physical (medical and dental) health care environments. There is no rigorous study of PSR in relation to CAM health care environments.

Conclusion: PSR in relation to health care environments is helpful for people with SMI. Further research on PSR in general, and in relation to CAM health care environments in particular, is needed.

Relevance/implications: Due to the many and considerable health related needs of people with SMI, more work is required to develop, study and disseminate PSR and related practices regarding health care environments.
Research Methods and Practice

Board #17
Reporting of Standard Research Ethics Procedures in General Psychiatry Peer-Reviewed Empirical Publications
L. Pallaveshi, P. Subramanian & A. Rudnick

Introduction: Ensuring use of research ethics procedures is important. We examined the reporting (and its predictors) of standard research ethics procedures in general psychiatry journals.

Methods: We reviewed all primary (human) research articles published from 2000 to 2012 in four general psychiatry journals: American Journal of Psychiatry, Archives of General Psychiatry, British Journal of Psychiatry, and Canadian Journal of Psychiatry. Regression was used to predict reporting of research ethics procedures by journal, year of publication, number of authors, country of first author’s affiliation, study design and evaluation methods.

Results: Of 5,894 articles found and reviewed, 71.3% of the studies reported informed consent and 56.6% reported ethics approval. 8.2% reported assessment of capacity to consent to (or decline) research participation and 2.7% reported a waiver of informed consent. Number of authors (p<0.001), journal (p<0.001), and study design (p<0.001), were significant predictors of reporting informed consent and ethics approval. Country of affiliation of first author (p < 0.001) was a significant predictor of reporting informed consent, and year of publication (p < 0.001) was a significant predictor of reporting ethics approval.

Conclusion: Research ethics procedures were under-reported in these journals.

Relevance/implications: Maximizing and monitoring of research ethics reporting is needed in psychiatry.

Board #18
Inter-professional Research Training with a Focus on Cognitive Vitality
Iris Gutmanis, & Maggie Gibson

Background: The Centre for Cognitive Vitality and Brain Health, under development at St. Joseph’s Health Care London, will advance interdisciplinary research, education and clinical care to promote cognitive vitality and brain health. Designating cognitive vitality as the topical issue within established inter-professional training opportunities can foster growth of this strategic focus.

Objectives: To describe a flexible research training model that can be scaled to: 1) meet undergraduate and graduate placement criteria; 2) cross disciplinary boundaries in pre-placement research education; and 3) result in project deliverables that synthesize a student’s progress while contributing to the organization’s understanding of cognitive vitality.

Methods: As staff working within an academic teaching hospital, holding Western University appointments (MG: Psychology; IG: Epidemiology), the authors routinely accept student training placements. Since June 2012, five students have completed their research training with a focus on cognitive vitality (third year undergraduate nursing (2), fourth year (honours) psychology (2) and pre-doctoral psychology residency (1)).

Results: Geared to the stage, duration and curriculum requirements of their placements, the inter-professional research training model developed by the authors rests on a four component framework (literature search; citation management; hypothesis development; and knowledge dissemination) that can be adapted to a chosen topic. High quality student end-products/reports are evidence of increased skill development.

Conclusions: Student projects have lent breadth and depth from an inter-professional perspective to the supervisors’ understanding of cognitive vitality and increased organizational knowledge.

Implications: To maximize outcomes within available resources, existing opportunities can be used to focus a lens on organizational priorities.
Board #19
Research Experience in Psychiatry Residency Programs Across Canada: Current status.
A. Shanmugalingam, S.G. Ferreria, R.M.G. Norman, & K. Vasudev

Objective: To determine the current status of research experience in psychiatry residency programs across Canada.
Method: Coordinators of Psychiatric Education (COPE) resident representatives from all seventeen psychiatry residency programs in Canada were asked to complete a survey regarding research training requirements in their programs.
Results: Fifteen of the seventeen COPE representatives completed the survey, representing 88% of the Canadian medical schools that have a psychiatry residency program. Eleven of the 15 programs (73%) require residents to conduct a scholarly activity in order to complete residency. Some of these programs incorporated such a requirement in the recent five years. Ten respondents (67%) reported availability of official policy/guidelines on resident research requirements. Among the 11 programs that have a research requirement, ten (91%) require residents to complete one scholarly activity; one requires completion of two scholarly activities. Eight (53%) residency programs reported having a separate research track. All of the programs have a research coordinator and fourteen (93%) programs provide protected time to residents for conducting research. The three most common types of scholarly activities that qualify for the mandatory research requirement are a full independent project (10 programs), a quality improvement project (8 programs), and assisting in a faculty project (8 programs). Six programs expect their residents to present their final work in a departmental forum. None of the residency programs require publication of residents' final work.
Conclusions: The current status of the research experience during psychiatry residency in Canada is encouraging but there is heterogeneity across the programs.
Clinical Implications: Research Training during Residency is important to promote lifelong evidence-based practice for optimum patient care and to provide residents with an opportunity to discover their interest in research.
Clear national guidelines for research competency are required in order to ensure that all the psychiatry residency programs in Canada provide comparable research training to their residents.
Limitations: this survey was solely administered to the seventeen psychiatry residency programs in Canada and the results are reflective of only the Canadian system of training.
The information gathered in the survey is based on knowledge and perceptions of the COPE resident representatives of each program and not the program directors or the resident body.

Schizophrenia and Psychosis

Board #20
The Prognostic Significance of Early Remission of Positive Symptoms in First Episode Psychosis
Ross M.G. Norman, Rahul Manchanda & Deborah Windell

Objectives: Time to remission of positive symptoms has frequently been used as an important indicator of treatment outcome for patients with a psychotic disorder, but there has been little investigation of its significance for longer term outcomes. In this presentation we test the hypothesis that earlier remission of psychotic symptoms is associated with better symptoms and functioning outcomes at five year follow-up.
Method: Time to remission of positive symptoms, other early characteristics and 5 year outcomes were assessed in a prospective study of 132 patients being treated for the first time for a psychotic disorder.
Results: Just under 60% of patients showed remission of positive symptoms within 3 months. In comparison to later remitters, they showed lower levels of positive symptoms, greater likelihood of competitive employment and less likelihood of collecting a disability pension at five years.
Discussion: Early remission of positive symptoms may have prognostic significance for longer term symptoms and functioning outcomes.
Implications: Efforts to bring about remission of positive symptoms as quickly as possible may have implications for long term functioning in patients with first episode psychosis.
Board #21
Examining and Contrasting the Social Stereotype of Schizophrenia and Depression
Ross M.G. Norman, Elizabeth Hampson, Richard Sorrentino, Yang Ye, & Li Yixian

Objectives: An essential aspect of the concept of stereotype is differential attribution of characteristics to individuals on the basis of their membership in a social category. In the current study we used the diagnostic ratio to assess this characteristic in beliefs concerning individuals diagnosed and treated for schizophrenia, depression and generic “mental illness”.

Method: Four hundred and eighty-six individuals completed a web-based survey rating the probability of characteristics among individuals treated for schizophrenia, depression or mental illness, as well as the likelihood of the characteristics in the general population. The diagnostic ratio, which examines the extent to which group membership leads to differential attribution of characteristics, was used to identify stereotypic beliefs.

Results: There were stronger stereotypes for schizophrenia than for depression or general mental illness. All three clinical labels were seen as associated with stereotypes of presenting difficulties in interaction and psychological weakness. In addition, schizophrenia, but not the other labels, was associated with preceptors of danger and incompetence. Sex of the respondent and familiarity with the target condition had limited effects on stereotypes.

Conclusions: There is evidence of stronger stereotypes associated with schizophrenia than with depression or generic mental illness. Specifically, schizophrenia is more likely to be seen as differentially related to danger and incompetence.

Implications: Efforts to reduce the stigma associated with mental illness need to be tailored to specific diagnostic groups. Providing objective correcting preventions of differential likelihood of characteristics may provide one basis for reducing stigma.

Acknowledgements: This research was supported by the Social Sciences and Humanities Research Council of Canada. Ethics approval was received through the NMREB of Western University.

Board #22
Glutamatergic Changes Detected Upon Functional Activation with a Stroop Task in Healthy Controls and in Subjects With Schizophrenia
Reggie Taylor, Betsy Schaefer, Richard Neufeld, Raj Rajakumar, Peter Williamson, & Jean Théberge

Introduction: Proton magnetic resonance spectroscopy (1H-MRS) is a useful tool for non-invasively studying the main excitatory neurotransmitter glutamate (Glu). Glu has been implicated in the neuropsychiatric disorder Schizophrenia (SZ) using 1H-MRS[1] but has only been studied in resting conditions. It is therefore of interest to examine the dynamic regulation of Glu in SZ upon functional activation.

Methods: The Color Stroop Task is a psychological task that is known to be difficult for those with SZ[1]. 1H-MRS spectra from the Anterior Cingulate Cortex (ACC) was acquired from 14 healthy controls, 14 subjects with SZ within their first two years of symptom onset, and 10 subjects with unipolar mood disorder performed the task using a 7T MRI. All subject provided informed written consent. Funding provided by Ontario Mental Health Foundation (OMHF).

Results and Conclusion: Healthy controls and the SZ groups both showed significant (p<0.05) increases in Glu during the first block of activation relative to the resting condition (2.1% and 1.4%, respectively). The mood group’s Glu response did not reach significance yet. No significant differences between subject groups have been observed, inferring that people with SZ can regulate Glu dynamically as well as healthy controls. This study is the first to report on the ability of healthy controls and subjects with SZ to dynamically regulate their levels of ACC Glu.

Board #23
The Relationship Between Insight and Autobiographical Memory for Emotional and Non-Emotional Events in Schizophrenia
A.G. MacDougall, M. McKinnon, K.A. Herdman, M.J. King, G.M. MacQueen, & M. Kiang

Introduction: Poor insight in schizophrenia (SCZ) could stem from impairments in autobiographical memory (AM), particularly for events of negative emotional valence.

Objectives: To evaluate episodic and semantic AM recall for positive, negative and neutral-valenced events, and their relationship with insight in SCZ.

Methods: Performance of SCZ patients (n=24) and normal controls (NC; n=24) under free recall and probing conditions on the Autobiographical Interview (AI) were compared using mixed ANOVA. Known predictors of insight that correlated with Scale of Unawareness of a Mental Disorder (SUMD) items were controlled for in the multiple regression analyses examining the relationship between insight and AM performance.

Results: Under free recall, SCZ patients compared to NC recalled fewer episodic details (p<.001) but did not differ on the number of semantic details recalled. Patients compared to NC recalled fewer episodic and semantic details for negative-valenced events (p = .002), but the groups did not differ on these measures for positive or neutral events. Group differences disappeared with addition of strategic retrieval supports. After controlling for age at first admission, episodic AM recall for negative events was a significant predictor of past awareness of having a mental disorder and its social consequences.

Conclusion: Patients with SCZ showed impaired episodic AM recall and disturbed recollection of negative events, although the use of strategic retrieval supports mitigated these deficiencies. Patients with poor recall of negative events despite retrieval supports were more likely to have poor insight. Targeting AM as part of an integrated treatment approach is worthy of further study.
Trauma and Dissociation

Board #24
The 4D-Model of Trauma-related Dissociation: An Empirical Study of a Novel Theoretical Framework
Matthew Brown & Paul Frewen

Background: A recent framework known as the 4D-model of Trauma-related Dissociation (Frewen & Lanius, 2014) differentiates between symptoms of clinically significant distress based on whether the symptoms do or do not intrinsically exemplify trauma-related altered states of consciousness (TRASC). METHODS: Undergraduate students (n = 342) participated in an online survey and completed several measures assessing childhood experiences and psychological symptoms. Female PTSD patients (n = 25) completed similar measures before entering treatment. RESULTS: Findings across samples were generally as follows: Non-TRASC symptoms (experiences of distress associated with Normal Waking Consciousness [NWC]) were endorsed less frequently than TRASC symptoms. On average, symptoms of NWC-distress were more strongly intercorrelated than symptoms of TRASC. Symptoms endorsements of TRASC incremented over NWC-distress symptoms in predicting Traumatic Dissociation Scale (TDS) total scores, and the reverse was not true. NWC and TRASC symptoms were both weakly correlated with Dissociative Experiences Scale-Brief scores. Both TRASC and NWC-distress symptoms were correlated with a measure of childhood trauma history. In general, hypotheses were supported more strongly in the student than in the clinical sample. Limitations, future directions, and implications of the study will be discussed.

Learning Objectives: Understand a theoretical distinction between trauma-related symptoms that represent altered states of consciousness (TRASC) and those that instead generally represent non-specific indicators of general distress associated with normal waking consciousness (NWC)
Understand the basis of a new neurophenomenological framework for understanding the symptomatology of posttraumatic stress: the 4-D model of trauma-related dissociation
Identify empirical support vs. lack thereof for the hypotheses of the 4-D model of trauma-related dissociation in 2 samples: a student and female PTSD sample - and consider the implications of such results for the theory

Board #25
Dissociative Posttraumatic Symptomatology: Exploring the 4D-Model and the Perceived Relationship to Functional Impairment
Nicole Tzinnidakis & Paul Frewen

Recent research has provided support for the existence of a dissociative subtype of PTSD. In response, Frewen and Lanius (in press) developed a four dimensional model of posttraumatic stress symptoms. The model differentiates non-dissociative symptoms, which occur during normal waking consciousness (NWC), and dissociative symptoms, which occur during trauma-related altered states of consciousness (TRASC), along four dimensions: time, thought, body, and emotion. The model proposed a set of four hypotheses: that, in comparison to NWC, the TRASC symptoms are 1) less frequent, 2) less intercorrelated, 3) more likely in individuals with high dissociative symptomatology, 4) more likely in individuals with repeated/early trauma. The first goal of the current study was to explore further application of this model. The second goal was to investigate how individuals perceive the causal relationships between their posttraumatic symptoms and their social and occupational impairment, using the recently developed Perceived Causal Relations (PCR) scaling methodology (Frewen, Allen, Lanius, & Neufeld, 2012). A convenience sample of 556 participants (62% female) was obtained online. The results of the study partially supported the four hypotheses of the model, demonstrating less frequency and less intercorrelation among TRASC symptoms, but the hypotheses of TRASC being associated with other measure dissociation and with repeated/early trauma were only supported along the dimension of “body”. The PCR results provided the unexpected implication that individuals attribute more of their social and work problems to NWC symptoms than TRASC ones, and view social and work problems as being more of a contributor to their symptomatology than it is to them.

Learning Objectives: Understand a theoretical distinction between trauma-related symptoms that represent altered states of consciousness (TRASC) and those that instead generally represent non-specific indicators of general distress associated with normal waking consciousness (NWC)
Understand the basis of a new neurophenomenological framework for understanding the symptomatology of posttraumatic stress: the 4-D model of trauma-related dissociation
Identify empirical support vs. lack thereof for the hypotheses of the 4-D model of trauma-related dissociation in a fairly large sample obtained online, including relationship between TRASC, NWC-distress, and perceived social and occupational impairment
Board #26
Mindfulness and Metta-based Trauma Therapy (MMTT): Introduction to an Internet Resource for Persons with Trauma and Stressor-Related Disorders
Nicholas Rogers & Paul Frewen

A burgeoning literature documents the broad benefits of mindfulness meditation (MM) practice for cognitive function and emotional health. MM generally involves maintaining one’s attention toward internal sensations (e.g., breathing) and disengaging from sources of distraction (i.e., mind wandering), with or without the aid of external reminders (e.g., the regular sounding of a bell). Repeatedly practicing MM is known to be associated with improvements in working memory and a person’s capacity to exert attentional control away from emotional distractors (e.g., intrusive thoughts or memories) in controlled trials. MM-based interventions also have proven efficacy in the treatment of disorders of cognition-emotion interaction including depression and anxiety disorders and, more recently, for PTSD. This poster will overview the rationale and initial empirical support for an MM-based website we devised in order to assist those with trauma and stressor-related disorders. Ratings referring to perceived benefit from use of the website will be described from a large online study (n=200) plus several smaller clinical studies of both treatment-seeking adults and youth.

Learning Objectives: Recognize the evidence base for the potential benefit of mindfulness- and metta-meditation based interventions for trauma and stressor-related disorders. Recognize the difference between different types of meditation practice and their trauma- and stressor-related symptom targets. Learn how to use an internet resource developed to support mindfulness-based treatment of trauma and stressor-related disorders.

Board #27
Independent Component Analysis of Self-Referential Processing in Women with Posttraumatic Stress Disorder
Elizabeth Thornley & Paul Frewen

Posttraumatic stress disorder (PTSD) is a condition than can develop after exposure, or repeated exposure, to a traumatic event. Recent changes to the diagnostic criteria for PTSD as well as new treatment implications reflect a shift of emphasis from fear to an emphasis on the dysregulation of emotions related to self-appraisal. Emotions of self-appraisal can be measured using valenced stimuli that relate to the participants concept of self. These paradigms are referred to as self-referential processing tasks. The current study used data from functional magnetic resonance imaging (fMRI) to investigate the activation of brain areas related to the self-referential processing of women. Activation patterns in women with PTSD were compared to those of healthy control women. Both participant groups (PTSD and control) completed the Visual-Verbal Self-Other Referential Processing Task (VV-SORP-T) to locate regions of interest in self- and other-referential processing in response to valenced social emotional stimuli. Results revealed group differences within the Default-Mode Network, Visual Cortex, and Cerebellum, among other regions. Results will be considered as they pertain to the DSM-5 diagnosis of PTSD and the theoretical notion of a “complex-PTSD”.

Learning Objectives: Understand the symptomatology of negative self- and other-referential processing in PTSD Understand a new experimental task designed to assess both negative and positive self- and other-referential processing: the Visual-Verbal Self-Other Referential Processing Task Understand the brain responses commonly occurring during both negative and positive self- and other-referential processing, including in persons with PTSD
Suicide Prevention

Board #28
Suicide Prevention Jurisdictional Review for Toronto Public Health
Leanna Reiss, Rahel Eynan, Francesca L. Schivone, Ravi Shah, & Paul Links

Objectives: This research report provides a jurisdictional review of suicide prevention strategies within Canada and abroad as well as interviews with international key informants in order to inform and advise the City of Toronto Department of Public Health on the formulation and implementation of a future urban suicide prevention strategy.

Methods: The jurisdictional review was completed by conducting an extensive environmental scan of national, regional, and local governmental or community-based suicide prevention strategy documents. Eighteen interviews with key informants were conducted using semi-structured interviews. The interview transcripts were analyzed using hybrid approach of qualitative methods of content analysis to extract the emerging themes.

Results: The report found that most national level and local level strategies to be influenced by the 1996 UN Guidelines for Suicide Prevention Strategies, which has resulted in many similarities between the strategies' goals and action areas. The increasing importance of evaluation has resulted in the English and Scottish strategies changing their interventions and target populations to include activities that can be evaluated. Other strategies, such as Australia's national strategy, are more focused on building resiliency skills in the general population in order to prevent potential suicidal behavior.

Conclusions: The distillation of salient features of suicide prevention strategies garnered from the jurisdictional review combined with recommendations from key informants provides an important guidance document for the development of efficacious urban suicide prevention strategies.

Board #29
Testing the Modified Escape Theory of Suicide in an Inpatient Clinical Population
Ravi Shah, Rahel Eynan, Marnin J. Heisel, Mohamad Elfakhani, & Paul S. Links

Suicide is a behavioural outcome that can be reached through several different behavioural pathways and contingencies. Baumeister (1990) proposed a theoretical model of suicidal behaviour in which he posited that suicide is effectively an escape from self. His Escape Theory of Suicide comprises a six-stage model in which suicidal behaviour results from an escalation of the person's wish to escape from extremely aversive self-awareness. Although researchers (Dean et al., 1999; 1996) have provided some evidence supporting this theory among adolescents and adults, several noteworthy factors have yet to be integrated into this theory and remain in need of investigation. Shame-based emotions and pathological narcissism may precipitate a sense of personal failure and trigger the chain of events. We propose to incorporate them into a Modified Escape Theory of Suicide.

Purpose: The study objectives are to test and compare: 1) the existing Escape Theory of Suicide in a psychiatric inpatient sample; 2) the proposed modified Escape Theory of Suicide.

Methods: For this cross-sectional study, adult participants are being recruited from the psychiatric inpatient unit at Victoria Hospital and administered the SCID-I and self-report measures of constructs relevant to our proposed model.

Findings: To date eight participants have been recruited into this on-going study. Preliminary findings will be presented.
SPECIAL THANKS AND ACKNOWLEDGEMENTS

Dr. David Streiner.
Western University Department of Psychiatry Research Committee.

Best Western Lamplighter Inn and Conference Center.

VideoWorks.

Stevens E3.

Motif Print.

The Family of Tom Hepburn.