The University of Calgary, Department of Psychiatry Presents
The Sebastian Littmann Research Day
Clara Christie Theatre Friday, February 25, 2011 at 12:30 P.M.

CLARA CHRISTIE THEATRE ROOM G202

Time	
12:30PM	**Welcome & Introductory Comments – Scott Patten**
12:45 PM	**Keynote Speaker – Royal College of Physicians & Surgeons of Canada, Region 1 Advisory Committee: Dr. Allen Frances** **"Opening Pandora's Box. What Psychiatric Diagnosis Can and Cannot Do."**
2:15 PM	**Refreshment Break**
2:30 PM	**Title: Post Traumatic Stress Disorder: A Hidden Diagnosis in Primary Care.** **Author(s):** <u>Stephen Boucher</u> Post Traumatic Stress Disorder lifetime prevalence rates in the Canadian Military likely under represent the true occurrence of Post Traumatic Stress Disorders (PTSD). There has been a dramatic increase in mental health problems and PTSD in Canadian Forces during ten years of war in Afghanistan. The prevalence of PTSD in the civilian community is under appreciated and is likely to grow as exposure to MVAs, war and violence increases in our "global village". Type I single incident trauma is contrasted with complex Type II trauma affecting children and adults. Type II childhood trauma can be viewed as a neurodevelopmental disorder and this has a tremendous influence on how patients with this condition present with symptoms in adult life. Type II childhood trauma in combination with adult trauma adds a degree of complexity to treatment of PTSD that can challenge treatment resources. The literature concerning use of psychotropic medications in PTSD is flawed and at times contradictory. Empirically tested Cognitive Behavioral exposure treatments for PTSD have some of the most robust evidence of efficacy in treatment of PTSD. However many patients suffering from chronic PTSD remain undiagnosed and do not receive optimum treatment that is empirically based and thus remain chronically ill.
2:55 PM	**CONTINUED:** _Post Traumatic Stress Disorder. A Hidden Diagnosis in Primary Care_
3:20 PM	**Title: Placebo response in the treatment of cancer-related fatigue – A systematic review (ongoing)** **Author(s):** Steve Simpson, <u>Aravind Ganesh</u> **Background:** Cancer-related fatigue (CRF) is a condition experienced by a large proportion of cancer patients that demonstrates considerable symptomatic overlap with Chronic Fatigue Syndrome (CFS), with the exception that diagnosing CFS requires the presence of at least four somatic symptoms. Aetiologically, both conditions may represent a conserved neurobehavioral symptom complex, with the fatigue states representing a manifestation of the host response to diverse triggering insults. One method to assess this would be to compare the incidence of placebo response in both conditions. A recent study (de la Cruz et al 2010) demonstrated that 56% of 109 patients with CRF had a response to placebo. However, a major limitation of this study is that it only included two RCTs. In contrast, a systematic review of the placebo effect in CFS (Cho et al 2005) found that 19.6% (95% CI 15.4-23.7) of 1,016 patients (29 studies) with this condition had a response to placebo. If CRF and CFS are indeed similar conditions, then repeated assessment of placebo effect in CRF should overlap with that in CFS. Furthermore, Cochrane Reviews recently published a systematic review for the treatment of CRF, involving 31 RCTs, of which only 15 actually represented treatment of classical CRF rather than confounding conditions. Given this information, we have undertaken a systematic review of all RCTs published to date on the treatment of CRF – excluding confounders such as anemia, cachexia, and ongoing cancer therapy that could secondarily cause fatigue – in order to accomplish three objectives: (1) Independently verify the findings of de la Cruz and colleagues (2010) (2) Update the literature reviewed for the most recent Cochrane Review to reflect both additional articles published and treatment guidelines (3) Provide a reliable estimate of placebo effect in CRF for comparison with that in CFS **Methods:** An efficient search strategy for Medline was developed, giving us a total of 66 RCTs that we are currently appraising for inclusion in the review. Using the pooled data from the selected studies, we will generate a reliable value for the placebo effect in CRF.

The University of Calgary, Department of Psychiatry Presents
The Sebastian Littmann Research Day
Clara Christie Theatre Friday, February 25, 2011 at 12:30 P.M.

CLARA CHRISTIE THEATRE ROOM G202

3:45 PM	**Title:** The Role of Brain Health in Optimal End-of-Life Care **Author(s):** <u>Ian T. Kroll</u> For thousands of years ancients have known that pain increases with emotional suffering and vice versa. Though end-of-life care has been evolving over the centuries, "total pain" and suffering at end of life often remain elusive and hard to treat despite providing the best palliative therapies currently available. Many medications used to treat pain, as well as medications used to ameliorate the significant side-effects of such pain-medications have well-known deleterious effects among healthy individuals, not to mention persons already struggling with multiple medical issues at end of life. The end result is a difficult scenario of trying to provide best pain relief while balancing with nausea, constipation, fatigue, sedation, depression, delirium, confusion, pain, anxiety, restlessness, akathisia, parkinsonism, and other side effects. Such impaired quality of life and increased suffering of the hospice resident results in increased suffering in loved ones, end-of-life caregivers, and in the overall hospice atmosphere. This descriptive presentation highlights advances in pain- and brain sciences which provide a new model for understanding, diagnosing and treating pain and suffering. The central role of CNS health in best treatment of pain, suffering and the many symptoms impairing good end-of-life quality of life are outlined. In addition, a review of the relationship models through which best standards of psychiatric diagnosis and treatment improves the well-being of not only patients, but also their families, caregivers, and the overall hospice environment will be discussed. Ongoing challenges which prevent best medical practices relevant to brain health from being incorporated into the palliative framework, including misinformation, stigma, and lack of up-to-date brain sciences information, are also reviewed. Ideas for research models to improve end-of-life care are outlined.
4:10 PM	**Title: Development of a North American Fatigue Management Program (FMP) for Commercial Motor Vehicle (CMV) Transportation – from Pilot testing to Industry Recommended Practice** **Author(s):** *Moscovitch A [1], Heslegrave RJ [2], Reimer M. (deceased) [3], Hirshkowitz M. [4]* (1) Fatigue Solutions International, Calgary, Ab. (2) University Health Network, Toronto, On (3) Fac..of Nursing, U.of Calgary, Calgary Ab (4) Baylor College, Medicine, Houston, Tex **Introduction:** This Fatigue Management Program (FMP), developed initially when the principal investigator was with the Canadian Sleep Institute, marks the first time that a broad spectrum, comprehensive intervention for Fatigue Management, consisting of educational, clinical and operational elements has been implemented and studied in a commercial operational Transportation setting. Funded primarily at the federal level in both Canada and the USA, along with additional support from regulatory and industry associations in both Alberta and Québec, the FMP is designed to reduce fatigue among commercial drivers, and as a result improve quality of life and road safety. Currently, this is the only study designed to investigate the human side of the fatigue management equation among motor carriers in North America, and has been accepted as the North American FMP, presently in the last phase of conversion to a Web based training program and interventional industry recommended practice. **Methods:** The FMP model was developed and field-tested on standard revenue-generating routes in three jurisdictions (Alberta, Québec and Texas) with drivers and carriers operating completely within existing Hours of Service regulations. In addition to obtaining both objective and subjective measures of sleep and fatigue, a step-wise approach for the screening and treatment of sleep disorders was also developed, with particular emphasis on sleep apnea. Pre/post measures of sleep and fatigue were obtained involving 45 drivers in three different jurisdictions, with different regulatory environments, and program development and implementation in 2 different languages (English and French). **Results** Among the most notable results were the following: (i) Pre FMP drivers averaged only between 5-6 hours of relatively poor sleep on both work and off-duty days; (ii) drivers consistently over-estimated their sleep time (between 45-90 minutes, on average) when compared to objective actigraphy data; (iii) 71% of drivers had some degree of sleep apnea, with 38% having a condition severe enough to warrant interventional treatment; and (iv) drivers treated for sleep apnea increased their sleep time by 73% (from four to seven hours). **Conclusion:** The results reported in this presentation reflect findings and conclusions from Phases I and II of a four phase study that started originally in 1999 as a small Alberta initiated pilot project, became the National Canadian pilot, and subsequently was also adopted by US Department of Transport as the North American model. From comprehensive review of all internationally available tools, education programs and interventional measures, we developed an integrated educational and interventional package, which was successfully tested and used in a CMV specific operational environment, with drivers on revenue generating routes. The subsequent field operational test (Phase III) has just been completed, with packing of the program into industry recommended practice just contracted under the auspices of the Canadian council of Motor Transport Administrators (CCMTA). As the Alberta Transportation Minister at the time (present Premier) described at the initiation of this project " With this pilot we hope to find effective means of dealing with fatigue on a more scientific basis, rather than simply rely on regulated hours of service. I believe that this pilot project will not only benefit the trucking industry, but the Alberta population as a whole" (Ed Stelmach, 2000). "Development of a North American Fatigue Management Program for Commercial Motor Carriers", Phases I-II Pilot Study, Transport Canada Report, TP 14828E, Jan. 2006.
4:35 PM	**Closing Presentations and Awards**

CLARA CHRISTIE THEATRE ROOM G202

Time	
2:15 PM	**Refreshment Break**
2:30 PM	**Title: How do structural brain abnormalities impact cognitive function in girls with Turner syndrome?** **Author(s):** <u>Signe Bray</u>, David S Hong, Bria Dunkin, Allan L Reiss Turner syndrome (TS) is a genetic disorder affecting females, resulting from the complete or partial absence of an X chromosome. The cognitive profile of TS shows relative strengths in the verbal domain, and weaknesses in the procedural domain, including working memory. Neuroimaging studies have identified differences in the morphology of the parietal lobes, and white matter pathways linking frontal and parietal regions, as well as abnormal activation in dorsal frontal and parietal regions. Taken together these findings suggest that abnormal functional connectivity between frontal and parietal regions may be related to working memory impairments in TS, a hypothesis we tested in the present study. We scanned TS and typically developing (TD) participants with functional magnetic resonance imaging (fMRI) while they performed visuospatial and phonological working memory tasks. We generated a seed region in parietal cortex based on structural differences in TS, and found that functional connectivity with dorsal frontal regions was reduced during working memory in TS. Finally, we found that connectivity was correlated with task performance in TS. These findings suggest that structural brain abnormalities in TS affect not only regional activity, but also the functional interactions between regions, with important consequences for behavior.
2:55 PM	**Title: Major Depression is a risk factor for Shorter Time to First Cigarette Irrespective of the Number of Cigarettes Smoked Per Day: Evidence from a National Population Health Survey** **Author(s):** <u>Khaled, SM</u>, Bulloch, AG, Lavorato, DH, Williams, JV, Patten, SB We assessed whether Major Depression (MD) predicts onset of Nicotine Dependence (ND) as measured by the Time to First Cigarette (TTFC) after waking and the roles of the number of cigarettes smoked per day (CPD) and stress as explanatory variables of this association. 10-years of follow-up data from the National Population Health Survey (NPHS) was used. The analyses were based on nationally representative sample of the Canadian population who were over the age of 12 years in 1996 (n=13,298). The NPHS included measures of MD and TTFC. Shorter TTFC was defined as TTFC within 5 minutes of waking. Heavy smoking (HS) was defined by smoking 20 or more CPD. Proportional hazard (PH) models were used and the unadjusted and adjusted hazard ratios (HRs) for shorter TTFC were estimated for those with and without MD. The unadjusted risk of shorter TTFC among those with MD versus those without MD was 3.7 (95% CI: 2.6-5.3, p<0.001). MD predicted onset of shorter TTFC even after adjustment for HS and tendency to smoke more under stress (HR: 1.7; 95% CI: 1.1-2.5, p=0.02). When TTFC was defined using longer cut-offs (30 minutes and 60 minutes), HS completely accounted for the effect of MD on TTFC onset. MD appears to be a risk factor for development of a distinct subtype of ND that is characterized by very short TTFC and is independent of HS and the tendency to smoke more under stress. As MD is modifiable, the above association points towards a preventive opportunity. **Keywords:** Major Depression; Nicotine Dependence; Time to First Cigarette; Cigarettes smoked Per Day; Prospective Longitudinal Study; Risk Factors, MD = Major Depression; ND= Nicotine Dependence; TTFC = Time to First Cigarette; CPD = Cigarettes smoked Per Day; HS = Heavy smoking; PH = Proportional Hazard; HR = Hazard Ratio; CI = Confidence Interval; NPHS = National Population Health Survey; OR = Odds Ratio; CIDI-SF = Composite International Diagnostic Interview Short Form; FTND = Fagerstrom Test for Nicotine Dependence.

The University of Calgary, Department of Psychiatry Presents
The Sebastian Littmann Research Day
Clara Christie Theatre Friday, February 25, 2011 at 12:30 P.M.

CLARA CHRISTIE THEATRE ROOM G202

3:20 PM	**Title: Determinants of Mental Health and Well-being in MS** **Author(s):** <u>S. Berzins</u>, S. Patten, A. Bulloch **Background:** Multiple sclerosis (MS) is the most common disabling neurological condition in young people. Major depressive disorder (MD) occurs with a dramatically elevated frequency in MS, and has a substantial impact on quality of life in MS. No longitudinal studies of depressive disorders in MS have been conducted, such that the incidence of and determinants of risk and prognosis for depressive disorder are largely unknown. **Objectives**: To describe the methods of a study that has the following goals:1.To estimate the incidence of major depressive disorders (MD) in people with MS. 2.To conduct an exploratory analysis on potential determinants of incidence of MD in MS. 3. To describe the outcome of MD in relation to potential determinants of MD. **Methods:** In this prospective cohort study, we will use short, internet-based questionnaires to collect comprehensive information from participants on a wide range of potential determinants of MD in MS, as well as outcomes, over a 6-month period. Participants will regularly complete a short depression diagnostic tool in order to capture MD symptoms as they occur. Prior to the full cohort study, we will conduct a pilot test of the collection instruments. This will allow refinements to instruments where necessary. A random, representative sample of 300 clients of the southern Alberta MS clinic who have been diagnosed with MS will form the study cohort. This clinic has a patient registry with 3099 eligible clients, so with this as the sample frame, we can sample participants representative of the source population of MS patients. We will assess a comprehensive list of variables related to depression, including socioeconomic status (SES), illness-related factors, childhood risk factors, stress-related and psychosocial factors, as well as current health behaviors. **Expected Outcomes:** The study goes will go beyond any existing study in its use of a representative sample (not just clinical attendees), a diagnostic measure (not merely symptom ratings), a prospective (as opposed to cross-sectional) design, and the comprehensiveness of assessment of risk and prognostic determinants. The goals are to gain knowledge that can be applied to develop screening or case-finding strategies that will help clinicians identify those at higher risk for MD and for chronicity of depression.
3:45 PM	**Title: Making *BOLD* statements about Risk and Burden of Illness in Major Depressive Disorder** **Author(s):** <u>Geoffrey Hall,</u> Glenda MacQueen Dr. Hall will present the results of two recent imaging studies in Major Depressive Disorder: **1)** Ruminative brooding has been linked to increased vulnerability to major depressive disorder and has been found to predict the onset, severity and duration of depression. Exposure to environmental stressors during childhood and adolescence may be associated with the dysregulation of specific brain regions important in conscious thought and depression. We have carried out an fMRI study examining rumination in teens/young women who are at risk of MDD by virtue of having a first degree relative with MDD, and a group of teens/young women with MDD. **2)** Impairment of recollection memory is consistently reported in Major Depressive Disorder (MDD) and may reflect underlying functional hippocampal changes, particularly in patients with extensive illness histories. We conducted an fMRI study of recollection memory – examining hippocampal activation in patients with extensive illness histories.
4:10 PM	**Title: Brain Predictors of Differential Treatment Response to Antidepressants in Major Depressive Disorder: Preliminary results** **Author(s):** <u>Raj Ramasubbu</u>, Ismael Gaxiola, Bradley Goodyear, Glenda MacQueen **Background:** Inter individual variability to antidepressant treatment response remains largely unpredictable. However, it is crucial to predict that variation to match the patients with appropriate antidepressant treatment in order to provide personalized medicine for depression. We therefore evaluated neural predictors of early treatment response during the first week of two antidepressant treatments in major depressive disorder (MDD) using functional magnetic resonance imaging (fMRI). **Methods:** 43 patients with MDD were scanned at the pre-treatment baseline (T1) and after one week (T2) of double-blind randomized control treatment with citalopram (20mg) or seroquel XR (150-300mg). While in the scanner, patients performed an emotional face matching task of negative (fear, anger, sad) and happy faces and control task of geometrical designs. Based on a previous meta-analysis, a 20% reduction in HAM-D 17 items scale at week one from the baseline was considered as early response. **Results:** In contrast to non-responders, citalopram responders exhibited increased pre-treatment activation in left inferior frontal, right temporal, left cerebellum, right posterior cingulate and left anterior cingulate cortices to negative emotional faces. Quetiapine XR responders compared to its non responders displayed decreased activity in left midbrain. **Conclusions**: These preliminary results suggest that neuroimaging can be used to predict differential treatment response that could guide our choice in the selection of antidepressant treatment.
4:35 PM	**Closing, Presentations & Awards in Clara Christie Theatre Room G202**

CLARA CHRISTIE THEATRE ROOM G202

Time	
2:15 PM	**Refreshment Break**
2:30 PM	**Title: Health Costs associated with Mental Health Diagnoses: A Case Comparison Study of Health Costs Controlling for Mental Health Costs.** **Author(s):** <u>Chris Wilkes</u>, David Cawthorpe, Lindsay Guyn, Bing Li, Mingshan Lu **Objectives:** Few studies have directly examined the health care costs of those who suffer from mental health problems. The quality of administrative data has improved to the point where such study is currently possible. We report prevalence and cost results for 9 years of administrative data, including inpatient, ambulatory and physician billing data comparing the health costs of groups with and without mental health problems. **Methods:** A data cube containing registration and visit data for all mental health cases was constructed and matched on age and sex in a ratio of 1:8 with non-mental health cases (n $_{TOTAL}$ = 683,481). Three groups emerged in the final dataset: Those with mental health problems treated in publicly funded tertiary care (n = 76,677, those with mental health problems treated in their doctors' offices (n = 277,627), and those without mental health problems (n = 328,177). **Results:** At present we have examined the Physician billing data for those old and younger than or equal to 18 years of age, with the overall finding in 52 Million billing records that the health costs (total costs – mental health costs) were greater for those with mental health problems in Groups 1 ($3437 average over 10 years) and 2 ($3265 average over 9 years) as compared to Group 3 ($1345 average over 9 years). Of note were that the mental health billings for Group 2 amounted to only 4.5% (1.9 Million) billings in the comparison group (42.3 Million billing records). **Conclusions:** Having a mental health problem has a profound impact on health-related expenditures. This has immediate and palpable for how mental health resources are constructed and rationed within the health care system. Future studies with this dataset will begin to examine the clinical pathways and time dependence of the emergence of mental health diagnoses and related physical diagnoses.
2:55 PM	**Title: Patterns of Disability, Care Needs, and Quality of Life of People Living with Parkinson's Disease in Canada** **Authors:** <u>Terriff DL</u>, Williams JVA, Bulloch AGM, Lavorato DH, Patten SB **Objectives:** To describe patterns of disability, care needs, and the health related quality of life (HRQoL) in a national community sample of people with Parkinson's disease (PD) in Canada. **Methods:** Data from Statistics Canada's Participation and Activity Limitations Survey (PALS) was used in the analysis. PALS is a post-censual survey that collected data from 28,630 household residents reporting activity limitations in the 2006 Canadian census. Frequencies of specific impairments and care needs as well as mean HRQoL ratings were estimated. These estimates were adjusted for age and sex using linear regression modeling. Sampling weights were used to adjust for design effects, ensuring that the estimates were representative of the national population. **Results:** The estimated prevalence of PD was 0.1% (100 per 100000 people), consistent with previous estimates. People with PD reported a significantly elevated prevalence of mobility (88.5%), communication (47.9%), pain (68.6%), memory (26.2%) and seeing (47.7%) limitations relative to those with other disabilities. Significantly more people with PD required help with instrumental activities of daily living and activities of daily living. Health related quality of life, measured by the Health Utility Index, was significantly lower in people with PD (mean HUI: 0.46) compared to disabled people without PD (mean HUI: 0.70). **Conclusions:** People living in the community with PD have a significant burden of disability. Health related quality of life is also quite poor in people with PD compared to other disabled populations. This study highlights the significant care needs of people with PD.

The University of Calgary, Department of Psychiatry Presents
The Sebastian Littmann Research Day
Clara Christie Theatre Friday, February 25, 2011 at 12:30 P.M.

CLARA CHRISTIE THEATRE ROOM G202

3:20 PM	**Title:** **The University of Calgary's Psychiatry Course Improves Medical Student Attitudes Towards Help-Seeking and Mental Illness** **Author(s):** <u>Andriyka Papish</u>, Aliya Kassam, Lauren Zanussi, Scott Patten **Background:** Healthcare providers are not immune to the stigma towards mental illness, and this can negatively impact patient care. Concerns have been expressed that some aspects of medical education may lead to the entrenchment of stigmatizing attitudes. Despite such concerns, the University of Calgary's Psychiatry course has been the top rated course at the medical school for several years. Furthermore, the University of Calgary has a higher proportion of students choosing a career in psychiatry relative to other Canadian medical schools. **Hypothesis:** One possibility is that this course's curriculum and delivery reduce student stigma towards mental illness, while promoting the value of psychiatric medicine. **Methods:** A survey was undertaken to understand the impact of the Psychiatry Course on medical student attitudes towards help-seeking and mental illness. Attitudes were compared with those for Type II Diabetes Mellitus. Data were collected at three time points using the Mental Health Commission's "Opening Minds" stigma scale. **Results:** The sample included n = 127 medical undergraduates. The majority of students (87%; 95% CI: 77%-94%) agreed that the course was effective in reducing prejudice and discrimination towards people with mental illness, and was effective in changing their behaviors (67%; 95% CI: 55%-77%). The "clinical correlations" component had the greatest impact on increasing student confidence in working with mentally ill people. Upon course completion, students expressed decreased self-stigma, improved help-seeking attitudes and greater compassion for mentally ill people, but remained concerned about the perceptions of others in the medical community. **Conclusion:** Results emphasize that psychiatric education can decrease stigma and improve help-seeking attitudes among medical undergraduates.
3:45 PM	**Title: The impacts of work environment, job dissatisfaction and depression on the intention to leave current employment** **Author(s):** <u>Cook TM</u>, Patten SB, Wang JL **Objective:** To investigate the relationship between workplace psychosocial factors and intention to quit current employment, and the mediating role of depression and job dissatisfaction. **Methods:** From January 2008 to October 2008, 4299 participants, aged 25-65, were recruited from Alberta using random digit dialing method. Data was collected by computer-assisted interview on intention to leave current employment, depression, work stress, workplace social support and respondent demographic characteristics. Data was analyzed using multivariate logistic regression. Depression was assessed by the Patient Health Questionnaire (PHQ) 9. **Results:** In final logistic regression models, depression and job dissatisfaction jointly modified the relationship between job security and intention to leave (OR 15.57, 2.11-115.01). Depression also modified the job dissatisfaction and intention to leave relationship. Dissatisfaction was an effect modifier in the relations between job insecurity, job strain and intent to leave. Individuals who were depressed or dissatisfied with employment were more likely to report intention to leave current employment. Social support from supervisors was independently associated with likelihood of intending to leave current employment. **Conclusion:** Depression appears to be an independent factor for intent to leave current job, but plays a small role in mediating the role between job dissatisfaction, job-related stress and intention to leave employment. Of the four work factors examined for their impacts on intention to leave, job strain was mediated by depression and dissatisfaction, and job security was mediated by dissatisfaction only, while supervisor social support was an independent risk factor. Social support from co-workers was non-significant. Depression and job dissatisfaction were significantly and strongly associated with intention to leave current employment.

The University of Calgary, Department of Psychiatry Presents
The Sebastian Littmann Research Day
Clara Christie Theatre Friday, February 25, 2011 at 12:30 P.M.

CLARA CHRISTIE THEATRE ROOM G202

4:10 PM	**Title: Mental Health Utilization among Individuals with Bipolar Disorder** **Author(s):** Andy Bulloch, Shawn Currie, Lindsay Guyn, Priscilla Liu, Scott Patten, Sebastian Saint ***Background:*** For effective future management of large-scale mental health treatment systems, it is important to be able to accurately estimate and compare population and treated prevalence for a given disorder. Of particular interest to health care planners is the difference between the two prevalence estimates; specifically, those individuals who have the disease but are not receiving treatment. In a previous paper, we compared treated prevalence estimates for bipolar disorder from two data sources, the Alberta Health Services Mental Health Data Repository and the Canadian Community Health Survey (CCHS). In this presentation, we show results from a more detailed analysis of prevalence estimates and health care utilization patterns for bipolar disorder, using some additional data sources. ***Methods:*** A review and data summary was carried out for questions related to bipolar diagnosis and treatment in the 2002 Canadian Community Health Survey (CCHS). From the Alberta Health Services Mental Health Data Repository, which pools administrative data on patient registrations from multiple Alberta Health Services mental health programs, data for bipolar patients from the most recently updated time period (eight fiscal years, 2002-03 to 2009-10) was extracted, and detailed utilization and treatment profiles were developed. Information on mood disorder patients was also available from the Alberta Health and Wellness Physician Claims database for a two-fiscal year period 2001-02 and 2002-03. Finally, individual data from mental health agencies contracted to Alberta Health services has recently become available, for the 2009-10 fiscal year. ***Results:*** From the CCHS data, it was estimated that the population prevalence of bipolar disorder in Canada was 2.5% (lifetime) and 1.1% (past 12 months). However, the treated prevalence of bipolar disorder was estimated to be between 1.2% and 1.5% (lifetime), and between 0.4% and 0.6% (past 12 months). Of those who were treated for bipolar disorder (lifetime), about 25% were hospitalized at one point in their lifetime. Interestingly, it was found that a large proportion of individuals who were screened positive for bipolar are not receiving any kind of professional treatment (41%-43%). There were 121,677 total clients in the AHS Mental Health Data Repository over the 8-year study period, and of these, 5,330 individuals over the age of 15 were diagnosed with a bipolar disorder. This represents just over 0.5% of the 2006-07 Calgary Zone population. Of this group, 2,310 (43.3%) were hospitalized with a bipolar diagnosis during the study period; 3,545 (66.5%) were hospitalized in a mental health inpatient unit for any reason; 3,485 (65.4%) were admitted to urgent care with a bipolar diagnosis, and 3,959 (74.3%) were active in an AHS-Calgary mental health community/outpatient program. 322 patients (6.0%) were seen only in urgent care and nowhere else. These cases could represent brief manic episodes that resolve quickly, or patients who are effectively managed by non-AHS services (e.g., family doctors) during non-crisis periods. ***Conclusions:*** Bipolar disorder is often a chronic condition and patients can be heavy users of the mental health care system. Understanding the patterns of treatment utilization within this patient population in a defined catchment area such as the Calgary zone can be very useful for decision makers. Data from different administrative datasets can be combined to give a reasonable estimate of actual treated prevalence for bipolar disorder in the Calgary region. Administrative data shows, for example, higher rates of inpatient psychiatric care by bipolar patients than would be predicted based on the self-reported treatment utilization from the CCHS. Understanding the sources of such differences will be important for decision makers when planning future mental health services.
4:35 PM	**Closing, Presentations & Awards in Clara Christie Theatre Room G202**

The University of Calgary, Department of Psychiatry Presents
The Sebastian Littmann Research Day
Clara Christie Theatre Friday, February 25, 2011 at 12:30 P.M.

CLARA CHRISTIE THEATRE ROOM G202

Time	
2:15 PM	**Refreshment Break**
2:30 PM	**Title:** At Risk for Psychosis: Outcome for "False-Positives" **Author(s):** <u>Jean Addington</u> ***Background:*** A major focus of early intervention research is determining the risk of conversion to psychosis and developing optimal algorithms of prediction. Although reported rates of non-conversion vary in the literature, it always includes a majority (85% to 50%) of the samples. Less is known about the outcome of this group that has been termed "false-positive". ***Method:*** A longitudinal study was conducted of over 300 prospectively identified treatment-seeking individuals meeting criteria for a psychosis risk syndrome. Participants were recruited and evaluated across eight clinical research centers as part of the North American Prodrome Longitudinal Study (NAPLS). Over a 2.5 year follow-up, 214 (71%) had not made the transition to psychosis. ***Results:*** The sample studied here included 111 individuals who had at least 1 year of follow up and did not transition to psychosis within the study duration. In year one, there was significant improvement in ratings on attenuated positive and negative symptoms. However, at least one attenuated positive symptom was still present for 43% of the sample at one-year and 41% at two-years. . ***Conclusion:*** Help seeking individuals who meet prodromal criteria appear to represent the following groups - those who are truly at risk for psychosis and are showing the first signs of disorder, those who remit in terms of the symptoms used to index risk status and who, therefore, may be considered to be "false-positives" and those who continue to have attenuated positive symptoms. This has clear implications for the use of antipsychotics in this patient group and for the proposed psychosis risk syndrome in DSM-V.
2:55 PM	**Title: A Spirituality Teaching Program for Depression: Shifts in Spiritual Involvement** **& Beliefs** **Author(s):** <u>Sabine Moritz</u>; Badri Rickhi; John Toews; Ming Fu Liu **Background:** Spirituality may be an important resource for coping with depression and there may be ways to nurture this mental health resource. Here we report on the effects a Spirituality Teaching Program had on the self reported spirituality levels of depressed individuals. **Methods:** <u>Study Design</u>: Spirituality levels were assessed in a total of 113 depressed individuals who participated in a randomized trial testing an 8-week Spirituality Teaching Program as a depression intervention. Participants were randomized to two study arms: 1. Spirituality Teaching Program Group (eight week spirituality teaching program) and 2. Waitlist Control Group (no intervention followed by use of the eight week spirituality teaching program starting at week 9). Assessments were taken at baseline, 8, 16 and 24 weeks. <u>Intervention</u>: The trial intervention was a self-study Spirituality Teaching Program delivered over 8 weeks. The program included the use of weekly 90 minute audio CDs as well as daily relaxation exercises and addressed the following spiritual concepts: self-transcendence, connectedness, forgiveness, self-acceptance, detachment, compassion and gratitude. The presented content was nondenominational to ensure compatibility with any beliefs participants may hold. <u>Outcome Measure</u>: The Spiritual involvement and Beliefs Scale (SIBS) was used to assess spirituality levels at baseline, 8, 16 and 24 weeks. **Results:** At baseline the two trial groups were similar in their spirituality levels (Spirituality Teaching Program Group: SIBS=95, 95% CI: 89 to 101; Waitlist Control Group: SIBS 98, 95% CI: 92 to 103). After 8 weeks, mean spirituality levels were significantly different (p<0.001) between the two groups (Spirituality Teaching Program Group: SIBS=113, 95% CI: 108 to 117; Waitlist Control Group: SIBS 98, 95% CI: 93 to 103). For the Spirituality Teaching Program group participants the increase in spirituality levels remained throughout the observation period with mean SIBS scores of 114 at 16 weeks and 113 at 24 weeks. After the wait list control group received the intervention, their mean SIBS score also increased significantly (p<0.001) to 112 (95% CI: 108 to 117) at 16 weeks and to 114 (95% CI: 109 to 120) at 24 weeks. **Conclusion:** The tested Spirituality Teaching Program appears to increase spirituality levels and may present an adjunct intervention for nurturing spirituality as mental health resource.

The University of Calgary, Department of Psychiatry Presents
The Sebastian Littmann Research Day
Clara Christie Theatre Friday, February 25, 2011 at 12:30 P.M.

CLARA CHRISTIE THEATRE ROOM G202

3:20 PM	**Title:** **Calling Their Bluff: Investigating the Accuracy of Skill Assessment Among Poker Players** **Author(s):** <u>Terri-Lynn MacKay</u>; David C. Hodgins **Background:** In the 21st century the game of poker has experienced unprecedented growth and popularity, largely because of the advent of online poker and televised poker championships. The major distinction between poker and many other forms of gambling is that poker involves an element of skill. Many players affirm that they are skilled at poker play and assert that they can consistently make money. The observation that players retain an obvious disregard for the luck component in poker indicates that there may be erroneous and false beliefs that operate to preserve an irrational sense of control over gambling situations. **Methods:** In the present study, researchers from the University of Calgary Addictive Behaviours Laboratory teamed up with researchers from the University of Alberta Computer Poker Research Group to investigate whether poker players accurately assess their skill level. Two hundred and seventy eight poker players from the University of Calgary (50% males) completed 75 hands of Texas Hold'em against an automated computer opponent. The computer program provides an estimate of a player's true skill and allows for a computational analysis of how much a player should have won/lost relative to the opponent. The analysis provides a far more accurate estimate of a player's skill than how much money was actually won or lost over those hands. **Results:** The results demonstrated that players are poor at assessing their actual skill. Only twenty-eight percent of participants were able to correctly classify themselves relative to the opponent (better/worse). In a linear regression analysis, gender, age, frequency of play, duration of play, and experience did not significantly predict skill level (ns, p > .05). Conversely, there were a number of variables that contributed to *perceived* level of skill. Participants who were male, played more frequently, played for longer periods of time and had more gambling-related cognitive distortions were more likely to perceive themselves as skilled players (F(8, 249) = 15.90, p < .001). Problem gambling was reported by 7% of the sample and another 27% were at moderate risk of developing gambling problems. Of specific interest was that poker players who had gambled on the Internet had a higher level of problem gambling severity when compared to poker players that had never gambled online, (t(275) = 5.58, p < .001). They were significantly more likely to endorse cognitive distortions related to skill and rate their poker skills as superior to those that had never wagered online, despite having no superiority in actual skill. **Conclusions:** The results of this study have implications for creating appropriate messages for players about games like poker that involve an element of skill. Consideration must be given to the equivocal nature of such games to develop effective treatment strategies. As gambling technologies change and evolve, researchers need to find new and innovative ways to study the phenomenon so we are moving at the same accelerated pace as the industry.
3:45 PM	**Title:** **Examining Eclectic Treatment Approaches and Cognitive-Behavioural Therapy: Preliminary Findings from a Survey of Eating Disorder Professionals** **Author(s):** <u>Laurel Wallace</u>; Kristin von Ranson **Background:** Growing emphasis on the use of empirically-supported treatments (ESTs) in health care services has led to significant progress in developing efficacious psychotherapies for eating disorders (EDs). Specifically, cognitive-behavioural therapy (CBT) has demonstrated efficacy in randomized controlled trials for bulimia nervosa (BN) and binge eating disorder (BED), receiving the highest grade of recommendation in the National Institute of Health and Clinical Excellence's guidelines for the treatment of both disorders. However, uptake of ESTs for EDs – including CBT – in clinical practice remains low (von Ranson & Robinson, 2006). Furthermore, therapists often report providing "eclectic" treatment, but details regarding the components of, motivations for, and outcomes of such treatment remain largely unknown. **Methods:** In this study we examined the role of empirical evidence and other contextual factors in practitioners' (N = 348) psychotherapy selection, including selection of an eclectic psychotherapeutic approach, for individuals with EDs. We distributed an online survey to members of two international organizations of ED professionals. **Results:** Most practitioners (81.9%) reported using CBT with their most recent BN client, but 50.8% of these practitioners incorporated CBT as part of an eclectic approach that included one or more other treatments. Chi-square analyses indicated that the tendency to favor an eclectic psychotherapeutic approach that incorporated CBT over the use of CBT as a stand-alone psychotherapy was associated with: the belief that CBT had inadequate empirical support to conclude it was effective (χ^2 = 7.54, *p* < .01); lack of research involvement in the past year (χ^2 = 14.86, *p* < .001); being female (χ^2 = 6.74, *p* < .05); and current employment in North America (χ^2 = 5.36, *p* < .05). Similar results were found in the treatment selection for BED. **Conclusions:** Although incorporating CBT into an eclectic approach may suggest that treatment is tailored to each individual case, it may also suggest that effects of CBT are diluted; that critical treatment components are possibly omitted; and/or that treatment length is unnecessarily extended, a problem within the constraints of managed care. Possible implications of these treatment trends and the use of an eclectic treatment approach will be discussed, and areas for future research will be suggested.

CLARA CHRISTIE THEATRE ROOM G202

4:10 PM	**Title: Transitional Youth Service for Young Adults aged 16-24 years: Review of Four Year Capacity** **Author(s):** <u>Richardson, Amanda</u>; <u>Sorbo, Adriana</u>; Manning, Robert; Cutting, Karen; Cawthorpe, David; Wilkes, Chris **Background:** A long tradition of research has highlighted the continuity of mental health disorders between childhood and adulthood. Nevertheless, health service systems have not kept pace with the lifespan concepts that underpin developmental psychopathology. Services focusing on transitional youth are an adaptation of the principles inherent in the conceptual framework of developmental psychopathology. In this paper we compare the clinical profiles of those enrolled in Transitional Youth Service and comparable young adults aged 16-18. **Methods:** Anonymous data was extracted from the regional access and intake system, which included demographics, and system level variables (e.g. service encounters). These data were analyzed in relation to demographically similar clients enrolled in other regional mental health programs. These two groups were compared using multivariable logistic regression analysis on the basis of diagnostic and clinical measures gathered on referral, enrollment and discharge (Western Canada waitlist children's mental health priority criteria score: 17 items: WCWL-CMH-PCS). **Results:** Patients enrolled in Transitional Youth Service have a distinct clinical profile in relation to 16-18 year old youth enrolled in other services. They are more likely to be female, tend to be more urgent at the time referral (higher WCWL-CMH-PCS), have a history of more admissions, are more likely to have psychotic symptoms, to be accepted into the service rather than referred to the community and to benefit from intervention. **Conclusions:** The model indicates that those flagged in the Transitional Youth Service have a unique clinical profile compared to others entering services who are not flagged as transitional youth. The implications of the findings validate that these youth require substantial support in making the transition to adulthood. Future research will compare the population of young adults before and after a recent program redesigned.
4:35 PM	**Closing, Presentations & Awards in Clara Christie Theatre Room G202**