



ALBERTA PSYCHIATRIC ASSOCIATION
MENTAL HEALTH AND RESILIENCE
Scientific Conference and Annual General Meeting

**20
15**

Conference Program

March 19 – 22, 2015

The Rimrock Resort Hotel, Banff, Alberta



Welcome to the 2015 APA Scientific Conference

The Alberta Psychiatric Association (APA) is the not-for-profit professional organization that represents the psychiatrists of Alberta. The APA has stood for more than fifty years as an advocate for its psychiatrist members, providing leadership and support for their role in the provision of quality mental health care in Alberta by promoting effective professional relationships and influencing health policy and clinical practice.

The APA has close ties to the Canadian Psychiatric Association and its committee structure mirrors that of the federal body addressing science and research, psychiatric education, standards of practice and economics.

The APA allies with the Alberta Medical Association sharing executive membership with the Sections of General Psychiatry and Child and Adolescent Psychiatry through which it elects members to the Representative Forum and works to achieve equitable fees and schedule of medical benefits.

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, approved by the Canadian Psychiatric Association (CPA). The specific opinions and content of this event are not necessarily those of the CPA, and are the responsibility of the organizer(s) alone.

Please note, a Credit Tracking Log Form is located inside your conference portfolio. This form can be used to keep track of the presentations attended throughout the conference. The SCAP Annual General Meeting and the APA Annual General Meetings are not eligible for CPD credits.



ALBERTA PSYCHIATRIC ASSOCIATION

Conference Learning Objectives

To examine, consider and appraise current leading clinical practices to enhance patient care.

To explore and consider the importance of developing resilience and addressing stigma in mental health.

To discuss and reflect upon resilience in our personal and professional lives as well as the systems and society within which we work.

Digital downloads of a number of the 2015 presentations will be available via secure login on the APA website. Go to "<http://albertapsych.org/events/conference/2015>", use login "conf2015" and password "2cv52015" to access these presentations in PDF format. Please note, some presentations may not be available until a few days following the conference. Thank you for your patience.



President's Gala

Join us in toasting the outgoing APA President and welcoming the incoming President at the annual President's Gala.

Canada's premier improv comedy duo, [Atomic Improv](#), will take centre stage for the evening's entertainment. Music and dancing to follow.

Residents' Night

Calling all Residents!!

Join your fellow residents for a night of beverages, hors d'oeuvres, music and mingling. The party will get underway at 9:30 pm on Friday night in the Yarrow Room - with no need to shut down early!

Bring the Family!

Embrace your inner child at our Family Fun Night on Friday, March 20th – great food, good company and myriads of activity options to keep children and adults alike entertained for hours!

Banff has much to offer as a vacation destination location, including:

- Skiing and snowboarding
(Mount Norquay, Lake Louise and Sunshine)
- Hiking and snowshoeing
- Ice skating
- Sledding and tobogganing
- Shopping
- Fine dining
- Hot Springs
- The Banff Centre
-and much more!



A Message From the President



Dear friends and colleagues,

It is my pleasure to welcome you on behalf of the Executive Board of the Alberta Psychiatric Association (APA) to the 2015 APA Scientific Conference and Annual General Meeting (AGM). As previous years, our Scientific Conference will be held at the Rimrock Resort Hotel in Banff.

This year the Scientific Committee has chosen 'Mental Health and Resilience' as the theme for our annual conference. The Scientific Committee, consisting of Dianne Maier, Janet De Groot, Katherine Aitchison, Sarah Tymchuk, Michal Szymczakowski and Wallace Smart, has been working very hard over the last year. Again, the Scientific Committee has put together an outstanding program that combines educational, social and recreational opportunities.

This would not have been possible without the exceptional administrative support from Erika Holter from Associations Plus. Please feel free to thank the members of the Scientific Committee for all the efforts they put into organizing a conference that promises again to be an exceptional event.

The format of our conference has not changed significantly from the 2014 meeting. The Scientific Conference runs from Thursday evening (March 19, 2015) until Saturday afternoon (March 21, 2015). Please join us for the President's Welcome Reception on Thursday evening from 19:00 – 20:00. You will have a chance to meet the members of the Executive Board of the APA and enjoy light refreshments with us. Please also plan to join us for the Annual General Meeting of the APA on Saturday afternoon, as well as the Section of General Psychiatry Annual General Meeting on Sunday morning. During these meetings you will receive an update on the activities of the Executive Board. You will also have a chance to provide your input on topics that the Section of General Psychiatry and the APA are currently dealing with.

Our Scientific Committee was able to attract an outstanding group of local, national and international experts to present at our conference. Wearing my hat as the Residency Research Director of the Department of Psychiatry of the University of Calgary, I am very proud of the impressive number of resident presentations at our Annual Meeting. As during previous years, our meeting is supported by Alberta Medical Association's Physician and Family Support Program (PFSP), the Canadian Psychiatric Association Continuing Professional Development Program (CPA CPD), as well as the APA Foundation. I would also like to thank the pharmaceutical industry for their ongoing support of our conference.

We are honored to welcome several special guests to the 2015 Annual Meeting. Unfortunately, the Honourable Stephen Mandel, Minister of Health, had to send regrets. However, we are quite pleased to welcome His Honour, Col. (Ret'd), the Honourable Donald S. Ethell, OC, OMM, AOE, MSC, CD, LLD Lieutenant Governor of Alberta, who will give greetings and welcoming remarks at 12:45 pm on Friday. Dr. Carl Nohr, President-Elect of the AMA, as well as Dr. Lyle Mittelsteadt, Senior Medical Advisor of the AMA, will be attending our meeting. It is my special pleasure to welcome our very own Padraic Carr, who will be representing the Canadian Psychiatric Association as their current President.

Our social program includes the President's Welcome Reception on Thursday evening, as well as the Family Fun Night on Friday evening, followed by the Residents' Reception. The President's Gala on Saturday evening features Canada's premier improv comedy duo Atomic Improv, followed by music and dancing.

I don't need to remind you of the exceptional recreational opportunities that are available in Banff.

Many of our invited speakers have commented on the exceptional atmosphere at our meeting. I am looking forward to another outstanding educational and informative annual meeting and I hope to see many of you in Banff.

Thomas Raedler, APA President, 2014 - 2015

25 Year Past President



Over the sixty years since it was founded, the APA has become an increasingly important organization. It has developed significant influence within the medical profession as a whole and has become an important voice in the halls of government. Patients with mental health problems have benefited enormously from the Association's advocacy. The Scientific Meeting has become an important and high quality educational event.

In 1991, Dr. Perry Segal took on the President's role for the APA. Dr. Segal remembers this as an exciting time, working with colleagues who shared a vision for the annual meeting which was further developing into an important academic endeavour. The APA recognizes that the current success of the organization would not have occurred were it not for the leadership of previous Presidents, and would typically take the opportunity to recognize the 25th year Past President at the President's Gala, however Dr. Segal is unfortunately unable to attend the Gala this year. We therefore would like to recognize Dr. Segal in the conference program for his important contributions to the APA.

2015 APA Conference Committee:

Dr. Thomas Raedler - APA President

Dr. Dianne Maier - Conference Chair

Dr. Katherine Aitchison - Scientific Co-Chair, University of Alberta

Dr. Janet de Groot - Scientific Co-Chair, University of Calgary

Dr. Wallace Smart - SCAP Representative

Dr. Sarah Tymchuk - Resident Representative, University of Alberta

Dr. Mike Szymczakowski - Resident Representative, University of Calgary

CME Policy on Full Disclosure

The APA requires disclosure of the existence of ANY AND ALL financial interest(s) or other affiliation(s) a presenter has with commercial supporter(s) of these educational activities, and/or with manufacturer(s) of ANY AND ALL commercial product(s) and/or provider(s) of ANY AND ALL commercial services discussed in the scientific program. The existence of such relationships does not necessarily constitute a conflict of interest, but the prospective audience must be informed of the presenter's affiliation with every commercial sponsor by way of an acknowledgement in program.

This policy is intended to openly identify any potential conflict(s) so that members of the audience in an educational activity are able to form their own opinions about the presentation. A reasonable test to guide decisions about what to disclose is whether any particular affiliation could cause embarrassment to the individual or institution involved or lead to questions about the presenter's motives if such affiliation(s) were made known to the general public.

The following presenters have indicated a financial interest or other affiliation with a commercial supporter of the session and/or with the manufacturer(s) of a commercial product and/or provider of commercial service(s):

PRESENTER	AFFILIATION
Jan Banasch	Janssen
James Chue Co-Author: Pierre Chue	AstraZeneca, Eli Lilly, GlaxoSmithKline, Hoffman-La Roche, Janssen, Lundbeck, Mylan, Otsuka, Paladin, Pfizer, Sunovion, Valeant
Leslie Citrome	Actavis (Forest), Alexza, Alkermes, AstraZeneca, Bristol-Myers Squibb, Eli Lilly, Forum (Envivo), Genentech, Johnson & Johnson, Janssen, Jazz, Lundbeck, Merck, Metivation, Mylan, Novartis, Noven, Otsuka, Pfizer, Reckitt Benckiser, Reviva, Shire, Sunovion, Takeda, Teva
Rachel Grimminck Co-Author: Oloruntoba Oluboka	Eli Lilly, Janssen, Otsuka-Lundbeck, Pfizer, Sunovion
Salim Hamid	Eli Lilly, Janssen, Otsuka, Shire
Vincent Hanlon Panelist: Gord Kelly Panelist: Paul Stenerson	Bristol-Myers Squibb, Janssen, Lundbeck, Sunovion Johnson & Johnson, Merck
Katharina Manassis	Barrons Educational Publishing, Guilford Publishing, Routledge Publishing
Ric Procyshyn	Janssen, Lundbeck, Otsuka, Sunovion
Thomas Raedler	Amgen, Boehringer-Ingelheim, Bristol-Myers Squibb, Forum, Janssen, Lundbeck, Otsuka, Pfizer, Purdue, Roche, Sunovion, Valeant
Wallace Smart	Janssen, Lundbeck, Purdue, Shire
Philip Tibbo	Bristol-Myers Squibb, Janssen, Otsuka, Roche

His Honour, Col. (Ret'd) the Honourable Donald S. Ethell,

OC, OMM, AOE, MSC, CD, LLD Lieutenant Governor of Alberta

The APA is pleased and honoured to welcome His Honour, Col. (Ret'd), the Honourable Donald S. Ethell, OC, OMM, AOE, MSC, CD, LLD Lieutenant Governor of Alberta to give greetings and welcoming remarks to the assembly at 12:45 pm on Friday, March 20. In his inaugural speech as Lieutenant Governor, His Honour spoke of his desire to make mental health and addictions an area of considered focus during his tenure. Highly sympathetic to Albertans who have battled these issues, His Honour serves as Patron for the Lieutenant Governor of Alberta's Circle on Mental Health and Addictions, a charitable organization dedicated to helping to reduce the stigma associated with mental health and addiction.



His Honour, Col. (Ret'd) the Honourable Donald S. Ethell was installed as the 17th Lieutenant Governor of Alberta on May 11, 2010. His Vice-Regal duties came following a long and distinguished career in the Canadian Armed Forces as well as civilian service as a military advisor and volunteer with humanitarian causes.

Donald Ethell was born in Vancouver in 1937 and raised in Victoria, BC. In 1955, he joined the Canadian Army (Regular) as a rifleman in the Queen's Own Rifles and then moved to the Princess Patricia's Canadian Light Infantry in 1970. He was commissioned as an officer in 1972.

Colonel Ethell is a veteran of 14 peace support operations. His military service included NATO duties in Germany, as well as extensive service in Cyprus, Lebanon, Syria, Jordan, Egypt, Israel, Central America and the Balkans. During the first Persian Gulf War, he served for 16 months as the Chief of Staff/Deputy Force Commander with the Middle East-based Multinational Force & Observers. From 1987 to 1990, he served in

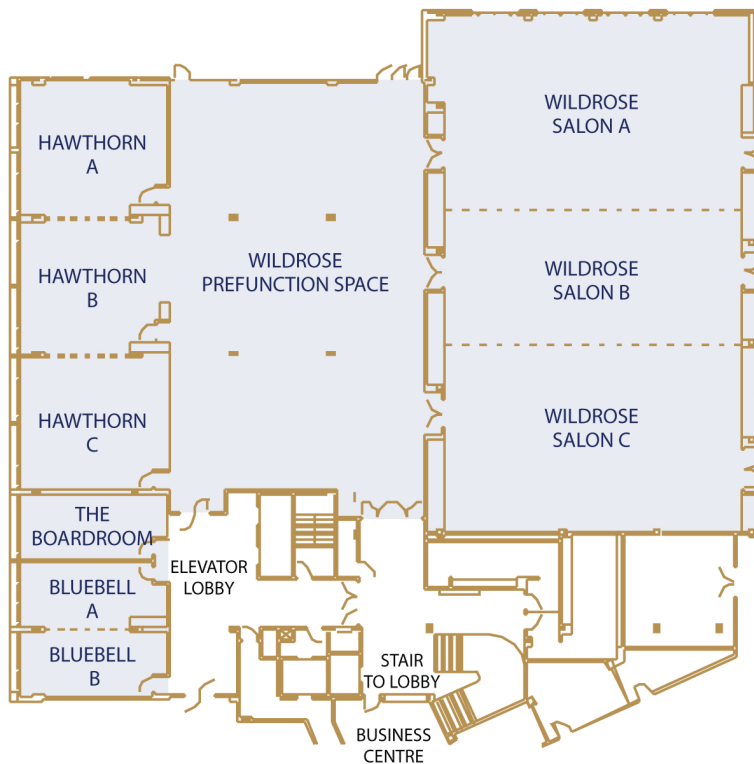
National Defence Headquarters as Director of Peacekeeping Operations. His last tour of duty was as the Canadian Head of Mission to the European Community's Military Mission to the former Yugoslavia during the wars of 1992 in both Croatia and Bosnia. Colonel Ethell retired from the Army in July 1993 as a highly decorated peacekeeper.

Following his retirement, Colonel Ethell travelled extensively as a military advisor and began to deepen his focus on humanitarian causes. He became involved with CARE Canada, working with staff responsible for five refugee camps in Eastern Kenya and Somalia. He was also Alberta director of the International Committee for the Relief of Starvation and Suffering (ICROSS) Canada, which delivers aid to the countless African children and adults facing starvation and AIDS-related illnesses.

He is a past member of the Veterans Affairs Canada, Canadian Forces Advisory Council and chaired various projects focused on strengthening mental health supports for members of the Canadian Armed Forces and the RCMP. He also has been an active member of numerous service organizations including the Canadian Association of Veterans of United Nations Peacekeepers, the Gulf War Veterans Association of Canada, the Royal Canadian Legion and the ANAVETS.

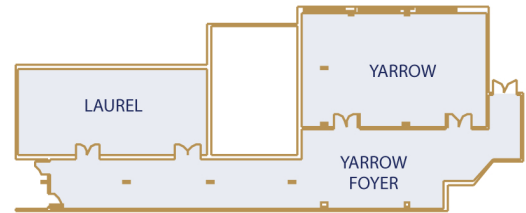
He is an Officer of the Order of Canada, a member of the Alberta Order of Excellence and the Order of Military Merit and a Knight of Justice of the Order of St. John of Jerusalem. In 1987, he received the Meritorious Service Cross for his work with neutral observers to plan and negotiate large scale, short notice prisoner of war exchanges between warring nations in the Middle East. He holds Honourary Doctor of Laws degrees from the Universities of Alberta and Calgary. In 2011, he became founding patron of the Lieutenant Governor's Circle on Mental Health and Addiction. In 2013, he was awarded the Pearson Peace Medal by the United Nations Association in Canada.

His Honour first moved to Calgary in 1956 and has made that city his home base ever since. He and his wife, Linda, have been married since February 1960. Their family includes two sons and daughters-in-law, Darrell/Ruth and Doug/Iryna, and two beautiful grandchildren, Natalie and Alec.



Rimrock Resort Hotel Conference Floorplan

LEVEL 6 SOUTH WING



LAUREL & YARROW
LEVEL 5 – SOUTH WING

Mark your Calendars!

The 2016 APA Scientific Conference will be held
March 17 - 21, 2016, at the Rimrock Hotel.

Look out for the Call for Abstracts and Call
for Resident Presentations coming this Fall.

Your Chance to Win!!

Two draws will be made at the President's Gala. One random draw for an iPad and a draw from among the exhibitor passport entries for a \$150 Visa gift card. Delegates must be in attendance at the President's Gala in order to claim their prize.



	Salon C	Hawthorn A	Hawthorn B	Hawthorn C	Bluebell	Yarrow	Laurel
Thursday, March 19, 2015							
17:00 - 19:00	Registration/Information Desk Open (Wildrose Prefunction)						
18:00 - 19:30	Dinner Symposium (Salon A/B) Antipsychotics: What's New? What's Different? What's Next? - Dr. Leslie Citrome, New York Medical College						
19:00 - 20:00	President's Welcome Reception (Wildrose Prefunction)						
20:00 - 22:00	Psychiatry at the Movies: "Happiness, Meaning and Work" - Dr. Janet de Groot and Dr. Elizabeth Wallace	"The Mindful Physician: Mindfulness in Practice and at Home" - Jaleh Shahin 20:00 - 21:00			APA Executive Meeting 18:00 - 19:00, 20:00 - 22:00		
Friday, March 20, 2015							
07:00 - 17:00	Registration/Information Desk Open (Wildrose Prefunction)						
07:30 - 08:00	Hot Breakfast Buffet (Salon A/B)						
08:00 - 09:00	Breakfast Symposium (Salon A/B) "Pharmacokinetics for Physicians and Clinicians" - Dr. Ric Procyshyn, University of British Columbia						
09:00 - 10:00	Keynote Speaker (Salon C) "Stories, Reflection and the Development of the Empathic Self: The Family Centered Experience Program" - Dr. Arno Kumagal, University of Michigan						
10:00 - 10:30	Refreshment Break (Wildrose Prefunction)						
10:30 - 11:30	Keynote Speaker (Salon C) "Hearing Voices: Recovery and Discovery" - Dr. Eleanor Longden, University of Liverpool						
11:30 - 12:35	CPA CPD Institute Lunch Symposium (Salon A/B) "The Importance of Cognition in Successful Management of Depression" - Dr. Roumen Milev, Queens University						
12:45 - 13:00	Greetings and Welcoming Remarks from His Honour, Col. (Ret'd) the Honourable Donald S. Ethell, OC, OMM,AOE, MSC, CD, ILD Lieutenant Governor of Alberta (Salon C)						
13:00 - 14:00	Keynote Speaker (Salon C) "Mental Health Commission of Canada: Stigma and Research, How the Truth Shall set us Free" - Dr. Rivian Weierman and Dr. Scott Patten						
14:00 - 15:00	Keynote Speaker "Truth and Reconciliation: What Role can Psychiatry Play in Improving the Mental Wellness of the Indigenous Peoples of Canada" - Dr. Caroline Tait, University of Saskatchewan	Keynote Speaker "Case Formulation in Children and Youth: Attending to Strength as well as Difficulty" - Dr. Katherine Manassis, University of Toronto		CPA CPD Institute "Mental Health and Pain: Similarities and Differences" - Dr. Serge Marchand, Université de Sherbrooke			
15:00 - 15:30	Refreshment Break (Wildrose Prefunction)						
15:30 - 16:30	Keynote Speaker (Salon C) "The Role of Metabolomics in the Diagnosis and the Mechanistic Understanding of Psychiatric Disease Symptoms and Pathology" - Dr. Dayan Goodenowe, Phenomenome Discoveries						
16:30 - 18:00	"Billing for Alberta Health Care Services How to Bill Effectively" - Marilyn Kroon and Dr. Roger Rampling	"D" is for Defence Mitigating Medicolegal Risk in Psychiatry" - Dr. Tim Zmijowskyj, CMPA		"Creating Connections: Alberta's Addiction and Mental Health Strategy" - Dr. Laura Calhoun, Alberta Health Services			
18:30 - 22:00	Family Fun Night (Salon A/B)						
21:30 - 24:00	Residents' Reception (Yarrow Room)						
Saturday, March 21, 2015							
07:00 - 16:00	Registration/Information Desk Open (Wildrose Prefunction)						
07:30 - 08:00	Hot Buffet Breakfast (Salon A/B)						
08:00 - 09:00	Breakfast Symposium (Salon A/B) "Optimizing Outcomes in Early Phase Psychosis" - Dr. Philip Tibbo, Dalhousie University						
09:00 - 10:00	Keynote Speaker (Salon C) "Teaching and Learning Resilience: Models, Metaphors, and Mountain Climbing" - Dr. Lara Hazelton, Dalhousie University						

2015 Conference Program Continued...

16:10 - 17:10	APA Annual General Meeting (Salon C)
18:30 - 24:00	President's Gala (Salon A/B)
Sunday, March 22, 2015	
07:00 - 12:00	Information Desk Open (Wildrose Prefunction)
08:00 - 08:30	Continental Breakfast (Salon A)
08:30 - 10:30	APA and Section of General Psychiatry Annual General Meeting (Salon C)
10:30 - 11:00	Refreshment Break (Wildrose Prefunction)
11:00 - 12:00	APA and Section of General Psychiatry Annual General Meeting Continued (Salon C)

Keynote Presentations

Thursday, March 19 | Dinner Symposium | 18:00 | Salon A/B

Anti-psychotics: What's New? What's Different? What's Next?

Dr. Leslie Citrome, MD, MPH

Evidence-based medicine (EBM) is a broad concept, but the key elements include the incorporation of clinical judgment (which requires clinical experience) together with relevant scientific evidence while remaining mindful of the individual patient's values and preferences. Using the framework and philosophy of EBM, this presentation summarizes the pharmacology, efficacy, and tolerability of newly approved oral anti-psychotics, including iloperidone, asenapine, and lurasidone, and outlines what is known about agents that are in late-stage clinical development, such as cariprazine, brexpiprazole and EVP-6124. Potential advantages and disadvantages of these agents over existing anti-psychotics are outlined, centered on clinically relevant issues such as the potential for weight gain and metabolic abnormalities, potential association with somnolence/sedation, extra-pyramidal side effects, akathisia, and prolongation of the electrocardiogram (ECG) QT interval, as well as practical issues regarding dosing instructions, titration requirements, and drug-drug interactions. Mention is also made of new long-acting injectable (depot) anti-psychotics including paliperidone, olanzapine and aripiprazole.

Learning Objectives:

At the end of this session participants will be able to:

1. Define and use the metrics of number needed to treat and number needed to harm to evaluate the results of clinical trials;
2. Distinguish differences among the new anti-psychotics and be able to apply this knowledge to enhance patient outcomes; and
3. Be knowledgeable about new formulations of anti-psychotics, as well as where and how they can be effectively used.

Literature References:

1. Citrome L. A review of the pharmacology, efficacy and tolerability of recently approved and upcoming oral anti-psychotics: an evidence-based medicine approach. *CNS Drugs*. 2013 Nov;27(11):879-911.
2. Citrome L. New second-generation long-acting injectable anti-psychotics for the treatment of schizophrenia. *Expert Rev Neurother*. 2013 Jul;13(7):767-83

Friday, March 20 | Breakfast Symposium | 8:00 | Salon A/B

Pharmacokinetics for Physicians and Clinicians

Dr. Ric M. Procyshyn, B.Sc. (Pharm), M.Sc., Pharm.D., Ph.D.
Emma Hamid

This presentation is divided into three sections. In the first part, pharmacokinetic parameters, such as half-life, clearance, and volume of distribution, will be defined and put into clinical context. Attention will be focused on half-life to demonstrate that this hybrid parameter is greatly influenced by many clinical variables including blood flow, renal function, and even obesity.

The second part of the presentation will discuss the pharmacokinetics of the available second generation long-acting injectable anti-psychotics. Comparisons between these agents will be made in order to help clinicians understand: 1) why the half-life of a long-acting injectable anti-psychotic is different from its oral counterpart; 2) why, in some cases, a loading dose is given when starting therapy with a long-acting injectable anti-psychotic; 3) what is the significance of steady-state as it applies to long-acting injectable anti-psychotics; 4) how changing the dosing interval or route of administration of long-acting injectable anti-psychotics influences plasma concentrations; and 5) why some long-acting injectable anti-psychotics require an overlap of oral medication upon initiation of therapy.

The third part of the presentation deals with a recently published hypothesis regarding the dosing of clozapine. Using pharmacokinetic simulations, an argument will be made to challenge the current wisdom of how clozapine is dosed.

Learning Objectives:

At the end of this session participants will be able to:

1. Understand some basic pharmacokinetic parameters and how they relate to clinical practice;
2. Appreciate the different pharmacokinetic profiles of long acting-injectable anti-psychotics and how this translates into their clinical use; and
3. Recognize how the pharmacokinetics of clozapine may help to guide dosing.

Friday, March 20 | 9:00 | Salon C

Stories, Reflection and the Development of the Empathic Self: The Family Centered Experience Program

Dr. Arno K. Kumagai, MD

One of the most important characteristics of the health care professional is empathy. However, how does one enhance empathy in medical students? The University of Michigan Medical School addressed this issue starting in the fall of 2003 through a comprehensive, required course, the Family Centered Experience (FCE). The FCE is a longitudinal learning experience that incorporates stories of individual patient-volunteers to teach patient-centered care.

In the FCE, pairs of first-year medical students are matched with volunteer patients in the community who have a variety of chronic illnesses. Scheduled home visits are conducted over two years to allow for conversations on a variety of themes, including the impact of illness on the self and family, experiences with doctors, stigmatization of illness and breaking bad news. Following each visit, students meet in small groups for discussions facilitated by a trained clinician-educator. The small groups remain together during the two years of the course and also meet during the third clinical year. Short reflective essays are used to stimulate discussion and students are encouraged to incorporate their own personal perspectives and life experiences into their reactions to, and thoughts about, the volunteers' stories. Learning is supplemented by readings, movies and interpretive art projects. The conceptual framework behind the FCE incorporates theories of narrative, moral development and transformative learning, as well as pedagogical approaches that emphasize critical reflection, "cognitive disequilibrium," perspective-taking and engaged small group dialogues as the basis for fostering a professional identity that includes internalized humanistic values and perspectives.

This talk is an exploration of the characteristics, challenges, and short and long-term impact of such a program on students and faculty. Our focus will be on how the creation of a curricular space in which patient stories, reflection, dialogue and art may open up the possibilities of being in the development of professionals who act with compassion, humanity and justice in the world. I propose that longitudinal conversations with individuals with chronic illness, coupled with small group interactions grounded within a conceptual framework emphasizing critical reflection and dialogue, enhance an understanding of the human dimensions of illness, challenge assumptions and transform perspectives regarding patients and their care, and affirm humanistic practices in teaching, learning, and medicine.

Learning Objectives:

At the end of this session participants will be able to:

1. Explore the meanings of empathy and reflection, as well as their role in health professions education and clinical practice;
2. Understand how stories may stimulate perspective-taking, identification with the other, critical self-reflection and moral actions in the world; and
3. Understand the emancipatory potential that teaching and learning may have to transform students into clinicians who embrace and embody humanistic values in medical care.

Friday, March 20 | 10:30 | Salon C

Hearing Voices: Recovery and Discovery

Dr. Eleanor Longden, MD

An increasing amount of research suggests that painful life events have a powerful impact on the origins and maintenance of voice hearing. This lecture draws on the presenter's own experience of voice hearing, as well as recent empirical and clinical findings to demonstrate how making sense of voice(s) content and context can promote healing and recovery. Practical guidance is provided for ways of interpreting the emotional representations that may be embodied by voices. In addition, information and resources are presented in regard to the International Hearing Voices Movement - an initiative that aims to support voice hearers, reduce stigma and prejudice and promote constructive, positive alliances between experts by experience (voice hearers, their friends, and family members) and experts by profession (clinicians and researchers).

Learning Objectives:

At the end of this session participants will be able to:

1. Understand the role of psychosocial adversity in influencing the content and characteristics of auditory verbal hallucinations, including those in the context of psychotic disorders;
2. Apply methods of psychological formulation to understand and interpret the emotional conflicts embodied by voices and to utilise this information in clinical practice in ways that serve recovery; and
3. Identify the contribution of user-led initiatives for creating a sense of solidarity and empowerment for individuals experiencing mental health problems.

Literature References:

1. Corstens, D. & Longden, E. (2013). The origins of voices: Links between voice hearing and life history in a survey of 100 cases. *Psychosis*, 5(3),270-285.
2. Longden, E. (2013). *Learning from the voices in my head*. New York, NY: TED Books.
3. Longden E., Corstens D., & Dillon, J. (2013). Recovery, discovery and revolution: The work of intervoice and the hearing voices movement. In S. Coles, S. Keenan, & B. Diamond, (Eds.), *Madness contested: Power and practice* (pp.161-180). Ross-on-Wye, England: PCCS Books.
4. Romme, M., & Escher, S. (2000). *Making sense of voices*. London, England: Mind Publications.
5. Romme, M., Escher, S., Dillon, J., Corstens, D., & Morris, M. (Eds.), (2009). *Living with voices: Fifty stories of recovery*. Ross-on-Wye, England: PCCS Books.

Friday, March 20 | Lunch Symposium | 11:30 | Salon A/B

The Importance of Cognition in Successful Management of Depression

CPA CPD Institute

Dr. Roumen Milev, MD, Ph.D., FRCPsych, FRCPC

Professor of Psychiatry and Psychology

Head, Department of Psychiatry, Queen's University

Learning Objective:

At the end of this session participants will be able to:

1. Appreciate and consider the effects of different treatment approaches on cognition.

Friday, March 20 | 14:00 | Hawthorn C

Mental Health and Pain: Similarities and Differences

CPA CPD Institute

Dr. Serge Marchand, Ph.D.

Professor, Université de Sherbrooke

Learning Objectives:

At the end of this session participants will be able to:

1. Identify the mechanisms implicated in the interaction between mental health and pain.

Friday, March 20 | 13:00 | Salon C

Mental Health Commission of Canada: Stigma and Research, How the Truth Shall Set us Free

Dr. Rivian Weinerman and Dr. Scott Patten

The Mental Health Commission of Canada's anti-stigma initiative, Opening Minds, has conducted research over the last five years to determine what kind of information and programs can help reduce the stigma among healthcare providers that is experienced by their patients living with mental health problems and illnesses. In the first half of the presentation, Scott Patten will discuss how Opening Minds has partnered with organizations across Canada running anti-stigma programs, conducting research into how well they deliver change related to stigma. Opening Minds research has determined the learning needs of healthcare providers, identified which programs work and what key ingredients make them effective. Many of these programs are available to be replicated by interested organizations in Canada.

During the second half of the presentation, Dr. Rivian Weinerman will discuss stigma from a clinical perspective and how stigma relates to "resilience." As a psychiatrist and teacher, Dr. Weinerman was instrumental in the creation of one of the most promising anti-stigma programs identified by Opening Minds. The Practice Support Program (PSP) has now been delivered to over half the family physicians in British Columbia. Dr. Weinerman will explain how resilience is related to physician/psychiatrist choices which allow them to better diagnose patients and move beyond medication as their only method of treatment. Skills that support resilience will be explained, and how, according to research, both psychiatrists and their mental health patients benefit from this method. These skills have also been successfully taught to front line workers of various disciplines.

Learning Objectives:

At the end of this session participants will be able to:

1. Understand learning needs of healthcare providers related to stigma;
2. Know the kinds of programming for healthcare providers which help reduce stigma;
3. Adopt skills that make a positive difference for their mental health patients; and
4. Recognize how these changes translate to greater job satisfaction and reduction in stigma.

Literature References:

1. Knaak S, Modgill G, Patten S. Key ingredients of anti-stigma programs for healthcare providers: A data synthesis of evaluative studies. *Can J Psychiatry* 2014;59(10 Suppl 1):S19–S26. <http://publications.cpa-apc.org/cjp/2014/supplement/files/assets/basic-html/page21.html>
2. Knaak S, Patten S. Building and delivering successful anti-stigma programs for health care providers: Results of a qualitative study. *Mental Health Commission of Canada*; 2014.
3. Weinerman R et al, Improving mental healthcare by primary care physicians in British Columbia. *Healthcare Quarterly*, 2011. 14:1, 36-38

Friday, March 20 | 14:00 | Salon C

Truth and Reconciliation: What Role can Psychiatry Play in Improving the Mental Wellness of the Indigenous Peoples of Canada

Dr. Caroline L. Tait, Ph.D.

This paper explores questions of truth and reconciliation as a conceptual framework for psychiatric and general mental health care delivery to Indigenous peoples of Canada. Specifically, the presentation draws upon the work of the Truth and Reconciliation Commission of Canada and Justice Murray Sinclair's direction to all Canadians to build reconciliation into our everyday practices. This paper will present a basic foundation for reconciliation that can be adopted across mental health care delivery provided to Indigenous peoples.

Learning Objective:

At the end of this session participants will be able to:

1. Incorporate cultural safety and reconciliation into their delivery of patient care to Indigenous peoples.

Friday, March 20 | 14:00 | Hawthorn A

Case Formulation in Children and Youth: Attending to Strength as well as Difficulty

Dr. Katharina Manassis, MD, FRCPC

Objectives: The case formulation is “a set of hypotheses that offers a psychologically coherent model for the patient’s problems and suggests the most appropriate mode of intervention” (Eells, 1997). It is increasingly relevant in psychiatric practice as we strive to understand complex comorbid conditions and as our understanding of psychopathology becomes rooted in developmental science. This presentation will highlight key aspects of case formulation in different age groups, with emphasis on identifying strengths that can be built upon in treatment.

Method: The rationale and evidence for psychiatric case formulation will be briefly reviewed. To formulate, the clinician must integrate biological, psychological, social and spiritual/cultural strengths and vulnerabilities to form a plausible story that explains the child’s current presentation. Case examples of children of different ages and symptom profiles will be used to illustrate how this can be done and how the formulation can inform subsequent interventions. Often, these interventions not only aim to reduce symptoms but also to improve functioning and foster resilience. Common challenges will also be illustrated, including the need to place symptoms in a developmental context, sensitive communication of case formulation findings to families, the need to sometimes revise the formulation based on new information or treatment response and effective teaching of case formulation to trainees.

Conclusion: Case formulation is a highly informative aspect of assessment in patients of all ages and can identify strengths as well as vulnerabilities that are relevant to treatment and may enhance its effectiveness.

Learning Objectives:

At the end of this session participants will be able to:

1. Understand the complementary roles of diagnosis and case formulation in the assessment of children and youth;
2. Challenge themselves to integrate strengths, difficulties and the developmental context in the formulation of children and youth; and
3. Appreciate the role of the case formulation in feedback to families, treatment planning and training in child and adolescent psychiatry.

Literature References:

1. Eells, T.D. (Ed.)(1997). Handbook of psychotherapy case formulation. Guilford Press, New York.
2. Manassis, K. (2014). Case formulation with children and adolescents. Guilford Press, New York.
3. Winters, N.C., Hanson, G., Stoyanova, V. (2007). The case formulation in child and adolescent psychiatry. Child & Adolescent Psychiatric Clinics of North America, 16:111-132.

Friday, March 20 | 15:30 | Salon C

The Role of Metabolomics in the Diagnosis and the Mechanistic Understanding of Psychiatric Disease Symptoms and Pathology

Dr. Dayan B. Goodenowe

In addition to the historic roles metabolites play in neurotransmission, neuronal membranes are comprised of metabolites called lipids. Membrane structure changes affect protein activity and neurotransmission. Decreased plasmalogens (PlsEtn) are a special class of lipids that have been reproducibly shown to be decreased in the brains of subjects with AD pathology and dementia.

PlsEtn biosynthesis (PB) can be quantitatively measured in blood and the degree of impairment correlates strongly with cognition and is predictive of cognitive decline. We have recently completed the analysis of two independent longitudinal trials – Rush University Memory and Aging Project and Religious Orders Study (n>6000) and the baseline samples from the NIH Alzheimer's Disease Neuroimaging Initiative (ADNI, n>800). PB was positively correlated with cognition in both males and females ($p<0.001$, model adjusted for age, education, and ApoE genotype). Using a binned PB model (PB3, PB2, PB1 = 0-20th; 21-80th; 81-100th percentiles respectively) and PB1 as the reference population, the OR for AD was 3.4 ($p<0.0001$) for PB2 and 8.8 ($p<0.0001$) for PB3 (model corrected for age, education, and ApoE status). Within genotype analyses revealed that the PB1 metabotype reduced AD prevalence from 10.8% to 2.4% and from 21.2% to 9.4% and the PB3 metabotype increased AD prevalence to 24.2% and 35.7% with PBV3/PBV1 OR of 19.1 $p<0.0001$ and 5.3, $p<0.02$ in e3e3 and e4 persons, respectively. These results provide direct evidence of metabolomic-genetic interactions in AD prevalence and symptoms and that genetic risk factors can be significantly modified by metabolic factors.

Learning Objectives:

At the end of this session participants will be able to:

1. Understand the role of membrane composition in protein function and neurotransmission;
2. Understand the role of membrane composition in aberrant brain pathology; and
3. Understand the role of impaired lipid metabolism in Alzheimer's disease (AD) and dementia.

Literature References:

1. Goodenowe DB, Cook LL, Liu J, Lu Y, Jayasinghe DA, Ahiahonu PW, Heath D, Yamazaki Y, Flax J, Krenitsky KF et al: Peripheral ethanolamine plasmalogen deficiency: a logical causative factor in Alzheimer's disease and dementia. Journal of lipid research 2007, 48(11):2485-2498

Optimizing Outcomes in Early Phase Psychosis

Dr. Philip Tibbo

In the last 20 years, there has been a burgeoning interest in the early phase of psychotic disorders as we better understand that the nature, quality and timing of treatment delivered is likely to have significant effect on an individual's long term outcome. We now conceptualize schizophrenia in phases which has led to a more clearly defined, comprehensive approach to managing this early phase of illness; "phase appropriate treatment." However, is this approach restricted to early phase and can it be generalized to all phases of the illness? This presentation will allow reflection and discussion on that question by reviewing our current understanding of actions needed to improve course and outcome for early phase schizophrenia. Topics to discuss include, but not limited to: optimization of pharmacologic and psychosocial treatment, improve somatic health, improving early recognition and intervention, the use of guidelines, improving adherence, as well as addressing and removing barriers to treatment.

Learning Objectives:

At the end of this session participants will be able to:

1. Discuss and reflect on strategies to improve outcomes in early phase psychosis.

Literature References:

1. The Psychosis Recent Onset Groningen Survey (PROGR-S): Defining dimensions and improving outcomes in early psychosis. Liemburg EJ1, Castelein S2, van Es F3, Scholte-Stalenhoef AN3, van de Willige G3, Smid H3, Visser E3, Knegtering H4, Bruggeman R3. PLoS One. 2014 Nov 20;9(11):

Saturday, March 21 | 9:00 | Salon C

Teaching and Learning Resilience: Models, Metaphors, and Mountain Climbing

Dr. Lara Hazelton

There is increasing awareness within medicine of the high levels of stress and burnout experienced by physicians in training and in practice. In addition to the effects on the individual, there are concerns that this may undermine the efficiency and effectiveness of doctors and have a negative effect on patient care. There have been numerous initiatives intended to promote wellness and develop resilience in medical students and residents, but the best approach is still far from clear. This presentation will explore how resilience in medicine has been understood, both historically and currently, and will consider how these models and metaphors can shape interventions for promoting resilience in learners and physicians in practice.

Learning Objectives:

At the end of this session participants will be able to:

1. Describe how the concept of resilience in medicine has evolved over time;
2. Explain how theories and definitions of resilience shape the development of initiatives to promote resilience; and
3. Develop an approach to teaching and learning resilience which is consistent with their own educational contexts and personal understanding of the construct.

Literature References:

1. Macedo T, Wilhelm L, Goncalves R, Coutinho E, Vilete L, Figueira I, Ventura P. (2014). Building resilience for further adversity: a systematic review of interventions in non-clinical samples of adults. BMC Psychiatry, 14(1):227.
2. Lefebvre DC. (2012). Perspective: Resident physician wellness: A new hope. Academic Medicine, 87(5):598-602.
3. Fletcher KE, Underwood W, Davis SQ, Mangrulkar RS, McMahon LF, Saint S. (2005). Effects of work hour reduction on residents' lives: A systematic review. Journal of the American Medical Association, 294(9):1088 -100.

Saturday, March 21 | Lunch Symposium | 12:00 | Salon A/B

Stigma Busting: Building Knowledge and Skills for Psychiatrists

CPA CPD Institute

Dr. Susan Abbey, MD, FRCPC, DFCPA

Psychiatrist-in-Chief, University Health Network

Professor, Department of Psychiatry, University of Toronto

Learning Objectives:

At the end of this session participants will be able to:

1. Describe the PEC (protest, education and contact) strategy to address stigma and discrimination towards individuals with mental health issues.

Keynote Speaker Biographies



Dr. Leslie Citrome, MD, MPH

Dr. Citrome is Clinical Professor of Psychiatry and Behavioral Sciences at New York Medical College in Valhalla, New York, and has a private practice in Pomona, New York. He is a member of the Board of Directors of the American Society of Clinical Psychopharmacology and the Mental Health Association of Rockland County. Dr. Citrome was the founding Director of the Clinical Research and Evaluation Facility at the Nathan S. Kline Institute for Psychiatric Research in Orangeburg, New York, and after nearly two decades of government service as a researcher in the psychopharmacological treatment of severe mental disorders, Dr. Citrome is now engaged as a consultant in clinical trial design and interpretation. He is a frequent lecturer on the quantitative assessment of clinical trial results using the evidence-based medicine metrics of number needed to treat and number needed to harm.

Dr. Citrome graduated from the McGill University, Faculty of Medicine, and completed a Residency and Chief Residency in Psychiatry at the New York University School of Medicine. He went on to complete a Masters in Public Health from the Columbia University, School of Public Health.

Dr. Citrome's primary research interests have centered on psychopharmacologic approaches to schizophrenia, bipolar disorder and major depressive disorder. He is the author or co-author of 400 published research reports, reviews and book chapters in the scientific literature, is the Editor-in-Chief for the International Journal of Clinical Practice, serves on the editorial board of nine other medical journals, reviews for over 50 journals, and has lectured extensively throughout the USA, Canada, Europe and Asia. He is the author of the book *Handbook of Treatment-Resistant Schizophrenia* published in 2013 by Springer Healthcare.



Dr. Ric M. Procyshyn, B.Sc. (Pharm), M.Sc., Pharm.D., Ph.D.

Dr. Ric Procyshyn is a Clinical Professor in the Department of Psychiatry, UBC. He also holds the position of clinical research psychopharmacologist at the BC Mental Health and Addictions Research Institute and acts as a consultant for the BC Psychosis Program. Along with his Doctor of Pharmacy degree, Dr. Procyshyn possesses a Ph.D. in Medicinal Chemistry. Dr. Procyshyn's research interests include smoking and schizophrenia, anti-psychotic polypharmacy, anti-psychotic associated metabolic disorders, mechanism of anti-psychotic action and drug utilization evaluations. He has authored several articles in peer-reviewed journals and is the principal editor of the *Clinical Handbook of Psychotropic Drugs*. Dr. Procyshyn enjoys teaching and has been awarded seven teaching awards from the Faculty of Pharmaceutical Sciences, University of British Columbia.



Dr. Arno K. Kumagai

Dr. Arno K. Kumagai is Associate Professor of Internal Medicine and Medical Education at the University of Michigan, Medical School. He is an endocrinologist and his clinical interests are in the intensive management of type 1 diabetes and insulin-induced hypoglycemia. He serves as Director of the Family Centered Experience Program and Longitudinal Case Studies, two small group-based courses in the first two years of medical school. He also directs the second-year Endocrinology Sequence and is active in curriculum design and administration. His research interests include use of narratives in medical education, active and transformative learning, faculty development, critical pedagogy and multicultural education.



Dr. Eleanor Longden

Eleanor Longden is an award-winning postdoctoral researcher with a specialist interest in voice hearing, trauma and dissociation, currently based at the University of Liverpool's Psychosis Research Group. After working for five years in an Early Intervention in Psychosis Service in the UK, she now does full-time research and training and has lectured and published internationally on different ways of understanding and recovering from emotional distress, including events for the World Health Organization, the American Psychological Association and the Royal College of Psychiatrists.

Her 2013 TED talk on voice hearing was featured on the front page of the Huffington Post and named by the Guardian newspaper as one of the '20 Online Talks That Could Change Your Life'. In its first year online, it was viewed 2.5 million times and translated into 33 languages.

Eleanor is coordinator of the Intervoice Scientific Committee, a trustee of Intervoice and the UK Soteria Network, an honorary member of the French Hearing Voices Network, a faculty member of the International Centre for Recovery Action in Practice, Education, and Research (ICRA) and a working group member of both the International DSM-5 Response Committee and the Global Summit on Diagnostic Alternatives. Her own experiences of trauma and psychosis are outlined in the book *Learning from the Voices in my Head* (TED Books, New York: 2013), in which she emphasizes the value of promoting creative, person-centred approaches that acknowledge the experiences and expertise of psychiatric patients more fully.



Dr. Rivian Weinerman

Dr. Weinerman received her training in ancient times at the University of Manitoba, Medical School. After a brief stint working in St. Louis as a GP, where she started her family, she returned to Manitoba and helped open the Primary Care Center attached to the Health Sciences ER, siphoning off patients from the ER who required less intensive primary care. She then took her psychiatry residency. In 1993, her dog died and the children left home so she made the move with her husband to Victoria BC, always working as a practicing psychiatrist and eventually becoming the Director of the Urgent Short Term Clinic, then Chief of Psychiatry South Island and Head of the Division of Collaborative Care for the island. In this position, she introduced telemental health to the island, and in 2008, she, with her team developed the CBIS manual, a mental health approach aimed at increasing the comfort, confidence and capacity of family doctors in the treatment of their mental health patients with

CBT skills not only pills. The BC government and Docs BC invited her team to roll out this innovative quality improvement Adult Mental Module across the province. 1500 family doctors have been trained and the training is still ongoing in BC. At the moment she is still working part time clinically and is the clinical lead in the randomized control trial of this module, partnering with the Mental Health Commission of Canada and Nova Scotia, as well as the Universities of Calgary and Toronto. For this work, she is the recipient of the CMHA Leadership award, the HEABC Golden Apple award for innovation, the UBC, CME/CPD Innovation award and the UBC TRICEPS award for the translation of research to clinical practice. She gets psychological rewards for being a wife, mother and grandmother of six.



Dr. Scott Patten

Dr. Scott Patten is a Psychiatrist and Epidemiologist at the University of Calgary. He is a Senior Health Scholar with Alberta Innovates, Health Solutions (formerly the Alberta Heritage Foundation for Medical Research) and Editor-in-Chief for the Canadian Journal of Psychiatry. His research focuses on mood disorder epidemiology and medical-psychiatric comorbidity. He is a principal investigator with the Mental Health Commission of Canada's "Opening Minds" program, focusing on reduction of stigma among health professionals. He practices psychiatry through the Consultation-Liaison Service located at the Peter Lougheed Centre and supervises MSc and Ph.D. students through the Department of Community Health Sciences at the University of Calgary.



Dr. Caroline L. Tait, Ph.D.

Caroline is Metis from MacDowall, Saskatchewan. She received her Ph.D. from the Departments of Anthropology and Social Studies of Medicine at McGill University. Caroline has a Bachelor of Arts degree from McGill University in anthropology and a Masters of Arts degree in medical anthropology from the University of California at Berkeley. During the 1995-1996 academic year, Caroline was a Fulbright Scholar and Visiting Fellow at Harvard University in the Departments of Anthropology and Global Health and Social Medicine. Caroline is the past coordinator of the National Network for Aboriginal Mental Health Research funded by the Institute for Aboriginal Peoples Health Research and completed a postdoctoral fellowship in the Division of Social and Transcultural Psychiatry, Department of Psychiatry, McGill University in May 2004. She is past Vice-Chair of the Aboriginal Women's Health and Healing Research Group, a national group of Aboriginal women who are funded

by the Women's Health Bureau, Health Canada.

In May 2004, Dr. Tait joined the Indigenous Peoples' Health Research Centre, First Nations University of Canada and the Department of Women's and Gender Studies, University of Saskatchewan. In 2007, Caroline joined the Department of Native Studies. In 2012, she joined the Department of Psychiatry.

Dr. Tait's research spans across North America, contrasting the Canadian and American public health responses to substance abuse by pregnant women. Her doctoral dissertation is entitled *The Tip of the Iceberg: The Making of Fetal Alcohol Syndrome in Canada*. Caroline is also the author of *A Study of the Service Needs of Pregnant Addicted Women in Manitoba*, and *Fetal Alcohol Syndrome among Canadian Aboriginal Peoples: Review and Analysis of the Intergenerational Links to Residential Schools*, commissioned by the Aboriginal Healing Foundation.



Dr. Katharina Manassis, MD, FRCPC

Dr. Manassis graduated from the Faculty of Medicine, University of Toronto, in 1986 and has been practicing Child & Adolescent Psychiatry since 1991. She founded and directed a clinical-research program in childhood anxiety disorders at the Hospital for Sick Children, Toronto, for over 20 years. She studied the etiology and cognitive behavioral treatment of these disorders and published over 80 papers in professional journals in this field. She has written five related books for parents and professionals, including her most recent book *Case Formulation With Children and Adolescents*.

She has supervised numerous graduate students on studies of child anxiety through her appointments at the Ontario Institute for Studies in Education and the Institute of Medical Science, University of Toronto. In 2014, Dr. Manassis left her hospital position to pursue

a practice in her home community of Pickering, Ontario, but remains on the faculty of the Department of Psychiatry, University of Toronto (Professor Emerita).



Dr. Dayan B. Goodenowe

Dr. Goodenowe obtained his undergraduate degree at the University of Saskatchewan in Agricultural Chemistry before going on to complete a Ph.D. in Medicine at the University of Alberta where he studied the neurochemical effects of psychiatric drugs. Professionally, he has held research scientist positions in both pharmaceutical and agricultural chemical industries and as an independent consultant specializing in biological mass spectrometry methods. Dr. Goodenowe is the President and CEO of Phenomenome Discoveries Inc. (PDI) which he co-founded in 2000.

PDI is a human health research company that uses its patented metabolomic biomarker discovery platform and patented informatic research tools to discover novel metabolite biomarkers. PDI has small molecule serum biomarker discovery programs in cancer and neurodegenerative diseases and has validated and filed patents on diagnostic biomarkers in multiple human health disorders. PDI has diagnostic and therapeutic programs for neurodegenerative diseases, including Alzheimer's disease and multiple sclerosis, as well as for cancer, including colorectal cancer, ovarian cancer and pancreatic cancer.



Dr. Philip Tibbo

Dr. Tibbo received his B.Sc. (Hons) from Mount Allison University in Sackville, NB, and his MD from Memorial University of Newfoundland. He completed his residency in psychiatry at the University of Alberta and following this, joined the staff at the University of Alberta Hospital as a clinician and researcher. He was instrumental in the development of and co-directed both the Bebensee Schizophrenia Research Unit and the Edmonton Early Psychosis Intervention Clinic.

In 2008, Dr. Tibbo was named the first Dr. Paul Janssen Chair in Psychotic Disorders and moved to Dalhousie University in Halifax, NS. In this position, Dr. Tibbo is leading an internationally recognized program of research into the causes and treatments of psychotic disorders. He is a professor in the Department of Psychiatry with a cross-appointment in Psychology at Dalhousie University and an adjunct professor in Department of Psychiatry at the University of Alberta. He is also Director of the Nova Scotia Early Psychosis Program (NSEPP) and Co-Director of the Nova Scotia Psychosis Research Unit (NSPRU).

Dr. Tibbo's publications are primarily in the area of schizophrenia and his current foci of study include individuals at the early phase of, and individuals at risk for, a psychotic illness. Dr. Tibbo has examined the role of the glutamatergic neurotransmitter system in the development of schizophrenia by using in vivo brain proton magnetic resonance spectroscopy (MRS) imaging in conjunction with the measurement of clinical variables and cognitive outcome. Dr. Tibbo is also involved with other neuroimaging projects employing fMRI and DTI. Other areas of research interests include co-morbidities in schizophrenia, psychosis genetics, addictions and psychosis, stigma and burden, pathways to care, education and non-pharmacological treatment options. He is funded by local and national peer-reviewed funding agencies and is well published in leading journals.



Dr. Lara Hazelton

Dr. Lara Hazelton is an associate professor with the Department of Psychiatry and Director of Faculty Development for the Faculty of Medicine at Dalhousie University. She completed residency training at Dalhousie in 1999, followed by a fellowship in psychotherapy at University of Toronto. She obtained a Masters of Education degree from Acadia University in 2013, her thesis research focusing on the teaching and assessment of professionalism. Dr. Hazelton has published in the areas of medical education, humanities, and ethics. Her current areas of research and scholarly activity include narrative, remediation in medical education and critical thinking. She practiced geriatric psychiatry for ten years and, since 2012 has been a general outpatient psychiatrist at the Cobequid Community Health Centre near Halifax, NS.



Dr. Roumen Milev

Dr. Milev graduated medicine in Sofia, Bulgaria, in 1983, obtained Specialty of Psychiatry in Bulgaria, MRCPsych in England and FRCPC in Canada, and defended his Ph.D. in Forensic Psychiatry. In 1995, he moved to Regina, Canada, where he became Medical Director of the Mental Health Clinic. In 2001, he was appointed Clinical Director of the Mood Disorder Research and Treatment Service in Kingston. In 2007, he became the Head of Department of Psychiatry at Queen's University.

He is actively involved in research with patients with depression, bipolar disorder, anxiety disorders and other affective disorders. Main areas of his research include issues of stigma and ways of dealing with it, sleep architecture, psychopharmacological and rTMS treatments.

Dr. Milev has many publications and significant teaching experience. He leads workshops and panel discussions at conferences and has presented numerous lectures to psychiatrists, family physicians and other health professionals. Dr. Milev is involved actively in both undergraduate and postgraduate teaching, including supervision of Masters and Ph.D. students. He has been involved with CANMAT guidelines for management of patients with bipolar disorders and with depression. He has won several prizes and awards.



Dr. Serge Marchand, Ph.D.

Dr. Serge Marchand, Ph.D., is Professor of Medicine at Univ. de Sherbrooke and has pain research labs at the centre de recherche clinique Étienne-Le Bel of the Sherbrooke University hospital (CRCELB-CHUS). He received his Ph.D. in Neuroscience from Université de Montréal in 1992 and then completed his post-doctoral training in neuroanatomy at the University of California in 1994. He is the author of several articles and book chapters in the field of pain mechanisms and treatment and is the author of the book *The Pain Phenomenon* at IASP press 2012 and the book *Mental Health and Pain* at Springer Press 2013. His research is characterized by a close link between fundamental and clinical projects on the neurophysiological mechanisms implicated in the development and persistency of chronic pain.



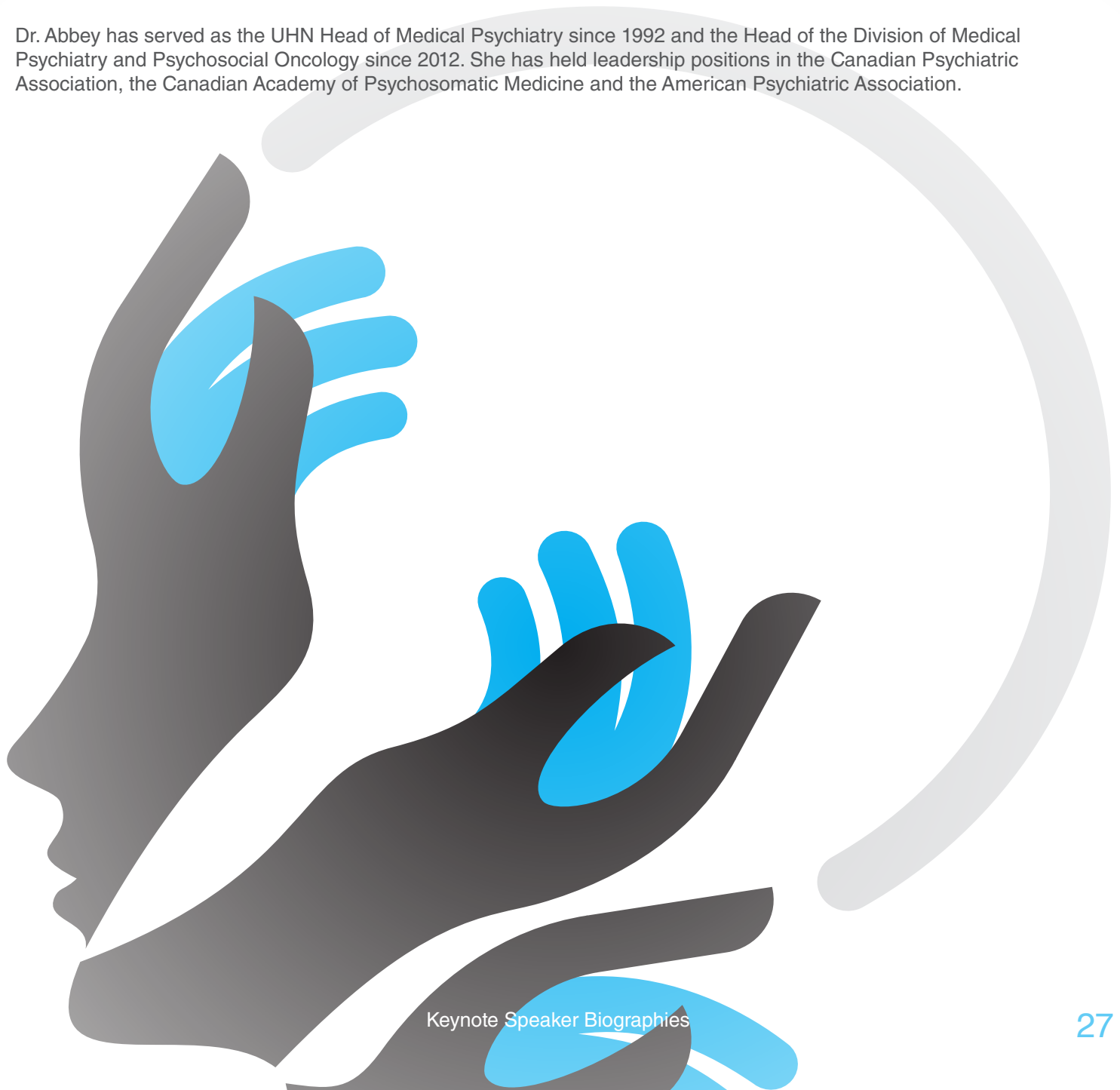
Dr. Susan Abbey, MD, FRCPC, DFCPA

Dr. Susan Abbey is currently Psychiatrist-in-Chief at the University Health Network (UHN), and Professor in the Department of Psychiatry at the University of Toronto. Her research and clinical interests have been related to the psychiatric care of patients in the medical and surgical setting and the use of mindfulness-based stress reduction (MBSR) in the management of medical illness. She has been extremely productive with regards to research and publications.

She has received numerous academic awards and honours including: the Robin Hunter Award for Excellence in Postgraduate Psychiatric Education, the Paul Patterson Education Leadership Award from the Canadian Psychiatric Association, the Prix d'Excellence from the Royal College of Physicians and Surgeons of Canada and the Bruno Lima Award for outstanding contributions to disaster psychiatry from the American Psychiatric Association.

Dr. Abbey also has a scholarly interest in medical education and continuing professional development and has presented abstracts and lectures at over 300 meetings and conferences nationally and internationally. She is an avid and well-loved teacher of medical students, residents and fellows.

Dr. Abbey has served as the UHN Head of Medical Psychiatry since 1992 and the Head of the Division of Medical Psychiatry and Psychosocial Oncology since 2012. She has held leadership positions in the Canadian Psychiatric Association, the Canadian Academy of Psychosomatic Medicine and the American Psychiatric Association.





Workshops & Presentations

Thursday, March 19 | 20:00 | Salon C

Psychiatry at the Movies: Happiness, Meaning and Work

Dr. Janet de Groot
Dr. Elizabeth Wallace

Experiencing work to have the same value as play does among children is reflective of career consolidation (Vaillant, 2003). It is more likely to occur when one is engaged in an intimate relationship characterized by reciprocity, mutual interdependence and commitment. Thus, what does it mean when a patient's simple question "are you happy?" provokes intense self-scrutiny and the pursuit of fantasies? What if this questioning occurs when one is in a committed relationship and has regular financial compensation for a job that is satisfying?

Defining happiness is a complicated endeavour. In the quirky, globe-trotting fable, *Hector and the Search for Happiness*, Hector, a psychiatrist, leaves his orderly life to find happiness. We follow the story to see how he defines happiness.

We will engage in a facilitated discussion about how do meaning, authenticity and happiness intersect? These may be important questions as burnout is prevalent among those with medical careers. We will consider how our answers may contribute to greater resilience both in our personal and professional lives.

Learning Objectives:

At the end of this session participants will be able to:

1. Describe the role of meaning and happiness in our professional identity; and
2. Describe how meaning and happiness influence our personal and professional lives.

Literature References:

1. Akhtar S. Happiness: Origins, forms and technical relevance. *Am J Psychoanalysis* 2010; 70(3) 219-244.
2. Vaillant G. Mental Health. *Am J Psych* 2003;

Thursday, March 19 | 20:00 | Hawthorn A

The Mindful Physician: Mindfulness in Practice and at Home

Dr. Jaleh Shahin, Registered Psychologist

Mindfulness refers to purposefully becoming aware of the present moment with an attitude of openness, curiosity and non-judgment. The literature suggests that mindfulness can play a role in physician wellness and resilience, as well as effective clinical decision making, reducing medical errors and enhancing the quality of patient care. This workshop will introduce mindfulness in the medical context and discuss its role in physician wellness and patient care. The focus of this experiential session will be on demonstrating various mindfulness exercises that can be implemented during clinical practice and at home.

Learning Objectives:

At the end of this session participants will be able to:

1. Provide a brief overview of the literature on mindfulness in the medical context;
2. Demonstrate various mindfulness exercises that can be implemented at home and at work; and
3. Discuss the role of mindfulness in physician wellness, resilience building and patient care.

Literature References:

1. Epstein, M. (2008). *Psychotherapy without the self: A Buddhist perspective*. New Haven, CT: Yale University Press.
2. Kabat-Zinn, J. (1990). *Full catastrophe living: Using the wisdom of your body and mind to face stress, pain, and illness*. New York, NY: Delta Publishing.
3. Ludwid, D., & Kabat-Zinn, J. (2008). Mindfulness in medicine. *The Journal of the American Medical Association*. 300 (11). 1350-1352.
4. Centre for Mindfulness, University of Massachusetts Medical School (2013), *Mindfulness in Medicine, Healthcare and Society* [Video File]. Retrieved from <http://www.umassmed.edu/cfm/resources/videos/>

Friday, March 20 | 16:30 | Salon C

Billing For Alberta Health Care Services — How to Bill Effectively

Marilyn Kroon, Alberta Medical Association

Dr. Roger Rampling, MD, FRCPC, Section Fees Representative

Psychiatrists in Alberta are largely paid by submitting claims for Fee Codes from the Schedule of Medical Benefits. In the six months from April to September 2014, they submitted for payment 711,506 claims for 1,312,641 services totaling \$67, 893, 445. There are general codes available to all physicians and codes specific to psychiatric care. Their definitions both support and constrain elements of care that are compensable in Alberta. Billing appropriately provides financial incentives for psychiatrists but there are other implications, including increased availability of care to patients, providing data on out-of-hours care, geographical service differences, length of usual services and even identifying unmet needs. Attendees can expect to learn and discuss aspects of the fee schedule of which they had little or limited knowledge.

Learning Objectives:

At the end of this session participants will be able to:

1. Understand the general and the specific fee codes pertinent to psychiatric practice;
2. Understand the nature of care involved in each of the relevant fee items; and
3. Submit appropriate claims for psychiatric services provided.

Literature References:

1. Alberta Health and Wellness Schedule of Medical Benefits

Friday, March 20 | 16:30 | Hawthorn A

"D" is for Defence Mitigating Medicolegal Risk in Psychiatry

Dr. Tim Zmijowskyj, MD

Psychiatrists work closely with patients and their families to manage complicated, often difficult-to-treat mental, emotional and behavioural disorders. Psychiatrists also coordinate care with a variety of other health professionals and agencies.

The most common legal and medical regulatory authority (College) cases involving psychiatrists related to issues of professionalism include inappropriate manner, boundary crossings and confidentiality breaches. Deficient risk assessment and medication management were the most common clinical issues. Communication and documentation issues were recurring themes across the cases. Risk mitigation strategies to address these issues will be examined.

Learning Objectives:

At the end of this session participants will be able to:

1. Discuss three medico-legal risks associated with psychiatric practice; and
2. Describe three risk management strategies to increase your defensibility.

Friday, March 20 | 16:30 | Hawthorn C

Creating Connections: Alberta's Addiction and Mental Health Strategy

Dr. Laura Calhoun
Mr. B. Andres
Dr. Mitchell
Mr. D. O'Brien
Dr. Trew
Mr. D. Vincent

This workshop is intended to update psychiatrists on the progress of Alberta Health/Alberta Health Services mental health strategy called "Creating Connections". It is an opportunity for psychiatrists to learn, ask questions and influence AHS Addiction and Mental Health leaders regarding the future direction of addictions and mental health in Alberta.

Background:

In 2011, the strategy was approved by the Government of Alberta and Alberta Health Services. The strategy has five major divisions, seven enabling conditions and 25 initiatives.

Initiative Examples:

1. Fundamental Basket of Services, which has the goal of increasing access to basic mental health care for Albertans.
2. Child and Youth Coordinated Intake and Referral Services Initiative would see all referrals for children and youth centralized to increase equity of service delivery.
3. ID Repository for the homeless that helps patients access and safely store identification.
4. Expansion of telemental health.

The workshop is intended to educate psychiatrists and stimulate discussion regarding the various initiatives and their impact on care provision. Psychiatrists will also be encouraged to identify the most pressing concerns they have for improvements to addiction and mental health services in Alberta.

Learning Objectives:

At the end of this session participants will be able to:

1. Better understand the direction Alberta is taking regarding addictions and mental health.

Literature References:

1. Creating connections: Alberta's addiction and mental health strategy. AHS, GoA. 2011.

Saturday, March 21 | 10:30 | Salon C

Stories of Strength and Flexibility: Narrating Resilience in Medicine

Dr. Lara Hazelton

In this workshop, participants will explore how narratives of resilience in medicine are constructed in fictional works and personal essays by physicians. Participants will be invited to write brief narratives of resilience and then enter into a process of reflection on these narratives that will explore elements including voice, character, setting, conflict, plot and resolution. Finally, participants will formulate an outline of how they might plan to use narratives to facilitate the development of resilience in learners.

Learning Objectives:

At the end of this session participants will be able to:

1. Understand how narrative analysis can be used to approach stories of resilience in medicine; and
2. Formulate a plan for using narrative approaches to fostering resilience in learners.

Literature References:

1. Macedo T, Wilhelm L, Goncalves R, Coutinho E, Vilete L, Figueira I, Ventura P. (2014). Building resilience for further adversity: a systematic review of interventions in non-clinical samples of adults. *BMC Psychiatry*, 14(1):227.
2. Lefebvre DC. (2012). Perspective: Resident physician wellness: a new hope. *Academic Medicine*, 87(5):598-602.
3. Fletcher KE, Underwood W, Davis SQ, Mangrulkar RS, McMahon LF, Saint S. (2005). Effects of work hour reduction on residents' lives: a systematic review. *Journal of the American Medical Association*, 294(9):1088 -100.

Saturday, March 21 | 10:30 | Hawthorn A

Resilience Across the Career Span: a Panel Discussion

Dr. Vincent Hanlon, MD
Dr. Gord Kelly
Dr. Vera Krejcik
Dr. Paul Stenerson

Resilience is the ability to bounce back after being psychologically stressed (Sotile and Sotile, 2002). During the stages of a career in medicine, the psychological stresses are dependent in kind, intensity and duration, not only on the work being done, but also on a host of other factors. This facilitated panel discussion will feature three panelists: Dr. Vera Krejcik, a psychiatry resident; Dr. Gord Kelly, a mid-career psychiatrist; and Dr. Paul Stenerson, a late-career neurologist making transitions. Each panelist will outline what “resilience” means to them and its relation to professional and personal satisfaction. Participants will be invited to respond with comments and questions for the panelists to enrich the discussion.

Learning Objectives:

At the end of this session participants will be able to:

1. See what “resilient physician” means at different career stages;
2. Share in and add to the collective wisdom of the group regarding effective ways to maintain and nurture resilience; and
3. Take the principles of resilience and personalize them into practical actions for daily life.

Literature References:

1. The resilient physician—effective emotional management for doctors and their medical organizations. W.M. Sotile and Mary O. Sotile. AMA Press. 2002.
2. First do no harm – being a resilient doctor in the 21st century. L. Rowe and M. Kidd. McGraw-Hill Australia. 2009
3. The resilient clinician. Robert J. Wicks. Oxford University Press. 2007

Saturday, March 21 | 10:30 | Hawthorn C

Teaching for Social Justice in Medical Education: A Hedgehog's View

Dr. Arno K. Kumagai, MD

In response to major educational mandates to address both the needs of increasingly diverse, globalized societies and disparities in health care, medical schools have implemented a wide variety of programs in cultural competency. In this workshop, we will critically analyze the concept of cultural competency and consider a proposal that education for social justice must go beyond the traditional notions of “competencies”; i.e., knowledge, skills and attitudes. It must involve the fostering of a critical awareness — a critical consciousness — of the self, others and the world, as well as a commitment to addressing issues of societal relevance in health care.

This interactive workshop will model the types of critical dialogues through which reflection may be stimulated.

Participants will be encouraged to bring in their own experiences in teaching, learning and clinical practice to augment their exploration of the workshop themes. Discussion will also be supplemented by short explanations of conceptual approaches based on theories of adult education, critical theory and theories of moral and cognitive development in order to enhance new and broader understandings in these vital areas of health professions education.

Learning Objectives:

At the end of this session participants will be able to:

1. Explore a unified "hedgehoggian" approach to teaching and learning in the areas of medicine of social or societal significance;
2. Critically assess the concept of competencies and to explore an alternative model of critical consciousness in medical education and clinical practice;
3. Consider the role of stories, dialogues and art in fostering an orientation towards social justice; and
4. Discuss the challenges, conditions and techniques of teaching and learning in these areas.

Saturday, March 21 | 13:30 | Hawthorn B

Women Who Kill their Children and the Role of Mental Illness as a Contributing Factor

Dr. Jan Banasch

Women have been murdering their children for centuries. It seems counter-intuitive to the maternal instinct to protect one's offspring. How does mental illness contribute to this clinical phenomenon? As physicians in general psychiatric practice, we need to be cognizant of the at risk group who will present to us long before they are seen by our forensic colleagues.

Recent cases in the media in Alberta prompted the author to research this important clinical topic which is seldom discussed in our annual forum.

This presentation is a clinically-focused session aimed at general adult and adolescent psychiatrists, although it is of interest to all participants. A review of media cases is included to highlight the different motive profiles. The author will review the psychiatric literature on filicide.

In keeping with the theme of the conference on resilience, the audience will gain appreciation for the tragic consequences of the breakdown of a mother's resilience. As such, what is our role as psychiatrists in promoting their resilience during high risk periods in a woman's life?

Learning Objectives:

At the end of this session participants will be able to:

1. Define the filicide classification system;
2. Determine the motives behind why women kill their children; and
3. Develop a screening tool for high risk mothers.

Literature References:

1. Child murder by parents: A psychiatric review of filicide. Phillip Resnick Amer. J. Psychiat 126, 325-334, 3 September 1969
2. Women who kill their children; P.T.d'Orban Brit J.Psychiat. 1979 134,560-71
3. Homicide, infanticide and filicide ; D. Bourget, A. Labelle ,Psychiatric Clinics of North America vol 15, #3 September 1992 661-673
4. The history of infanticide in western society ; K. Moseley, Issues in Law & Medicine, vol 1 #5 1986 345-361

Saturday, March 21 | 13:30 | Hawthorn C

Complex Adaptive Systems: Nonlinear Dynamics in Psychiatry and Psychotherapy

Dr. Yakov Shapiro, M.D, F.R.C.P(C)

Earlier versions of this workshop were offered at the 2009 Canadian Psychiatric Association meeting (course) and 2014 American Psychiatric Association meeting (workshop with Dr. R. Scott), with a lot of interest expressed by both dynamic and biological psychiatrists in learning more about this integrated model.

Nonlinear dynamical systems approach to psychiatric treatment integrates the advances in understanding complex adaptive systems (CAS) within a broad evolutionary framework. Re-casting the language of psychopathology in informational terms has the potential to liberate us from body/mind dualism and re-unify the third-person perspective of neuroscience and biological psychiatry with the psychodynamics of individual meaning. The emphasis of the treatment is on the emergent patterns of psychological complexity in health and psychopathology, with specific applications to individual and group psychotherapy process.

CAS approach to psychopathology offers the most comprehensive theoretical foundation for psychotherapy available to us today. Recurrent patterns of thinking, feeling and relating can be analyzed on the individual adaptive landscape by modeling objective, subjective and intersubjective clinical data. The emerging dynamical systems therapy (DST – Shapiro, 2015, in print) stands as a trans-theoretical model with the explanatory power to integrate systems of synaptic networks with systems of meaning. It powerfully argues for shifting the emphasis from presenting symptoms as the problem to be fixed to seeing them as maladaptive patterns – the patient's imperfect solutions to their developmental adversities. Patients are seen as agents who actively create their subjective and interpersonal reality, and therapeutic relationship becomes our tool in re-shaping the topology of the patient's a-landscape and re-establishing the resilience of the self-organizing process.

Learning Objectives:

At the end of this session participants will be able to:

1. Operate within a holistic model of psychiatric treatment without artificial separation between biological and psychotherapeutic approaches (both induce biological changes in the brain and carry psychological meaning);
2. Design a individualized formulation and treatment plan based on constructing an "adaptive landscape" map of the patient's particular attractor/repellor configurations; and
3. Utilize DST model as a teaching tool to help psychiatric residents and trainees shift from viewing mental illness as a random list of symptoms to looking at patients as intentional agents, with the power to rewire their affective, cognitive and social networks by exploring the adaptive meaning of their experiences.

Literature References:

1. Shapiro, Y (2014). Psychodynamic formulation in the age of neuroscience: a dynamical systems model. *Psychoanalytic Dialogues*, 24(2):175-192
2. Shapiro, Y (2015). Dynamical system therapy (DST): theory and practical applications. *Psychoanalytic Dialogues* (in print)
3. Marks-Tarlow, T (2008). *Psyche's veil: psychotherapy, fractals, and complexity*. Routledge

Saturday, March 21 | 13:30 | Bluebell

The Modern Bully: Bullying in the 21st Century

Dr. Sudhakar Sivapalan

Bullying can be defined as the activity of repeated, aggressive behaviour intended to hurt another person, physically or mentally. Bullying is characterized by an individual behaving in a certain way to gain power over another person¹. Although bullying has been around for centuries, the 21st century has brought a new form of this behaviour to the forefront - cyberbullying. This form of bullying makes use of technology - texting, email and social media. It has become increasingly common amongst children and adolescents, but targets can also include adults (known as cyber stalking or cyber harassment).

One of the features of cyberbullying is that, unlike physical bullying, cyberbullies can remain virtually anonymous². It is perhaps due to this anonymity, that cyberbullies feel free from normative and social constraints on their behaviour. The bystander phenomenon can also be different - others who are "witness" to the bullying, whether known to the victim or not, may engage in a "digital pile-on"³, a form of "mass bullying". The outcome for those that are bullied can be devastating⁴.

In this presentation, we will look at phenomenon of cyberbullying across various modes of technology, explore some of the psychological motivation for and consequences of cyberbullying and discuss what we, as practitioners, can do to help.

Learning Objectives:

At the end of this session participants will be able to:

1. Understand the concept of cyberbullying and its consequences;
2. Be familiar with the forms that cyberbullying can take; and
3. Develop strategies to assist victims of cyberbullying.

Literature References:

1. Besag VE. Bullies and victims in schools: a guide to understanding and management. Open University Press. 1989. Retrieved 2013-10-29.
2. Patchin JW and Hinduja S. Bullies move beyond the schoolyard: A preliminary look at cyberbullying. Youth Violence and Juvenile Justice. 2006; 4(2):148–169.
3. "Cyberslammed". www.cyberslammed.com, Retrieved 22 October 2012.
4. Goebert D et al. The impact of cyberbullying on substance use and mental health in a multi-ethnic sample. Matern Child Health J. 2011; 15:1282-1286.

Saturday, March 21 | 13:30 | Yarrow

The ASCP Model Psychopharmacology Curriculum – a Psychopharmacology Teaching Tool

Dr. Thomas J Raedler, MD

Psychopharmacology is the study of the use of medications in treating mental disorders (ASCP – American Society of Clinical Psychopharmacology). The advent of psychopharmacology over the past 60 years has had a tremendous impact on the practice of psychiatry. Psychopharmacology is a rapid changing field marked by new medications, new indications and a rapidly growing body of knowledge about side-effects and limitations of current treatments. Despite the importance of psychopharmacology, many psychiatric residency programs struggle with providing adequate training in psychopharmacology. At the same time, many psychiatric residents do not feel sufficiently well-prepared to practice psychopharmacology.

Under the guidance of Dr. Ira Glick, the ASCP Model Psychopharmacology Curriculum was specifically developed for use in psychiatric residency training. This curriculum will soon be available in its 8th edition and includes 94 lectures covering a wide range of topics. So far, the use of this curriculum has had limited use in Canada.

This workshop will give an overview over the ASCP Model Psychopharmacology Curriculum. The discussion will focus on how to implement this curriculum in residency training. Participants will also discuss how to integrate neuroscience into clinical psychopharmacology, as well as student preferences for interactive learning and online technologies rather than traditional lectures and readings.

Learning Objectives:

At the end of this session participants will be able to:

1. Understand the difficulties of psychopharmacology teaching;
2. Have a better understanding of the ASCP Model Psychopharmacology Curriculum; and
3. Be aware of new trends in psychopharmacology teaching.

Literature References:

1. Petersen T, Fava M, Alpert JE, Vorono S, Sanders KM, Mischoulon D. Does psychiatry residency training reflect the "real world" of psychiatry practice? A survey of residency graduates. *Acad Psychiatry*. 2007;31:281-9.
2. Zisook S, Glick ID, Jefferson JW, Wagner KD, Salzman C, Peselow ED, Stahl S. Teaching psychopharmacology: what works and what doesn't. *J Clin Psychopharmacol*. 2008;28:96-100.

Saturday, March 21 | 13:30 | Laurel

Using Literature to Teach the Past, Present and Future Phenomenology of Schizophrenia in the Cultural Context

Dr. Ron Oswald MD, FRCPC

Linking the cultural conceptualization of the phenomenology of schizophrenia to contemporary literature makes these challenging concepts more accessible. As the culture of the West transitioned over the more than 50 years that Herge was writing *The Adventures of Tintin* (1929-1983), schizophrenia appears to change its phenomenological presentation, as does the understanding as to what is causing the symptoms. DSM-5 abandons the term culture-bound syndrome because “it ignores the fact that clinically important cultural differences often involve explanations or experience of distress rather than culturally distinctive configuration of symptoms. [...] The current formulation acknowledges that all forms of distress are locally shaped, including the DSM disorders. [...] Across groups there remain culturally patterned differences in symptoms, ways of talking about distress and locally perceived causes, which are in turn associated with coping strategies and patterns of help seeking. [...] Like culture and the DSM itself, cultural concepts may change over time in response to both local and global influences.”

“To teach a student to read, in the fullest sense, is to help train him or her medically.” (Trautmann, 1978). The rush to competencies comes at a cost of thoughtful reflection. By mobilizing the imagination, literary works engage the reader more fully than do clinical or historical descriptions, even when the same experiences are portrayed. An excerpt from the story *Lowboy* by John Wray, may be used to teach the contemporary phenomenology of schizophrenia in a more engaging manner than the standard lecture. This presentation will outline how literature can teach students to listen more fully to their patient’s stories.

Learning Objectives:

At the end of this session participants will be able to:

1. Recognize how the cultural conceptualization of mental illness and specifically the phenomenology of schizophrenia, may change over time and that this can be illustrated by contemporary literature; and
2. Describe the concept of “slow learning” and how this may be used to teach the phenomenology of schizophrenia, as it presents in our culture using contemporary literature.

Literature References:

1. DSM-5
2. Stigma and prejudice in Tintin by J. Medrano et al. BMJ 2009;339:b5308
3. Why literature and medicine? by MF McLellan and AH Jones. Lancet. 1996 Jul 13;348(9020):109-11

Saturday, March 21 | 13:30 | Laurel

Genetics of Suicide

Dr. Salim Hamid
Dr. Emma Hamid

Epigenetic variation can lead to increased risk for suicide. Genes particularly involved in the HPA axis may be altered, leading to reduced efficiency of stress response, particularly that involving cortisol. This is important research as this may help identify those who are at particularly high suicide risk.

Epigenetic alteration in the SKA-2 gene was associated with those that showed increased suicidal tendencies, the goal to be able to target those with increased risk before the attempt is made.

SKA-2 is a gene associated with glucocorticoid receptor localization and its levels were decreased in those with suicidal ideation. This was associated with reduced salivary cortisol control. This was pronounced in individuals who had a combination of the desired genotype as well as particular life stressors. Furthermore, postmortem brain analyses indicated neuronal clusters with low SKA levels, suggesting differential expression in these tissues.

Experimentally, it has also been shown that defects in glucocorticoid receptor genes leads to reduction in the physiological mechanisms these hormones regulate. In the past, mice with mutations of this nature have shown increased suicidal tendencies and reduced ability to cope with stress. A small micro RNA, Mir301A, is hypothesized to be involved in SKA methylation interactions. Mir301A requires SKA2 interaction in order to be transcribed and increased methylation in intronic DNA may lead to lowered expression. This model is a promising link between suicidal tendencies linked to methylation mediated gene expression.

Learning Objectives:

At the end of this session participants will be able to:

1. Increase knowledge about the genetic links of suicide and methylation;
2. Inheritance of suicide genes and proposed impacts of stress diathesis; and
3. Basic clinical assessment of suicide.

Literature References:

1. Identification and replication of a combined epigenetic and genetic biomarker predicting suicide and suicidal behaviors - Jerry Guintivano, Ph.D.; Tori Brown; Alison Newcomer, M.Sc.; Marcus Jones; Olivia Cox, B.Sc.; Brion S. Maher, Ph.D.; William W. Eaton, Ph.D.; Jennifer L. Payne, M.D.; Holly C. Wilcox, Ph.D.; Zachary A Kaminsky, Ph.D. Am J Psychiatry 2014; doi: 10.1176/appi.ajp.2014.14010008

Saturday, March 21 | 14:10 | Laurel

Medical Students Love Psychiatry 'Zebras' - Are They a Distraction or a Good Bait?

Dr. Ron Oswald MD, FRCPC

Second-year medical students completed a project-based learning exercise as part of their pre-clinical psychiatry course. They were asked to pick a topic of interest, do a literature search to find a recent scientific paper, prepare a short presentation or video and write a multiple-choice question. The top 10 finalists were selected to give their 8-minute presentation to the class. The results of this exercise showed a relatively small number of students choosing a topic area where psychiatry overlaps with family medicine, another speciality or a career in research. Similarly, a small number of students chose or expanded upon topics that would be of relevance to what a general psychiatrist would need to know.

Many students chose “zebras” which are topic areas arcane to the general psychiatrist, but of interest to the student and perhaps reflecting what is interesting about psychiatry to the general population. Of most interest to students was dissociative identity disorder. “When you hear hoofbeats, think horses, not zebras” is one of medicine’s most enduring aphorisms. But the popular TV show House isn’t about dull, every day cases, for as Dr. House says, “I look for zebras because other doctors have ruled out all the horses.” In the literature, “residents and faculty agreed that rare cases, patients with unique physical finding and a variety of pathology were ideal for teaching services.” The “zebras” may kindle an interest in a topic area and heighten learning of the more boring “bread and butter” by adding a little spice. This presentation will highlight the “zebra” topics chosen by medical students to present and will discuss the pros and cons of using zebras as teaching cases.

Learning Objectives:

At the end of this session participants will be able to:

1. Describe what medical students find of interest in psychiatry and/or believe should be taught; and
2. Discuss the benefits and downsides of teaching about medical “zebras.”

Literature References:

1. Roberts et al. Resident and hospitalist perspectives on the “great teaching case”: Correlation with actual patient assignment decisions. Journal of Hospital Medicine. Aug, 2014.

Saturday, March 21 | 14:30 | Hawthorn B

Placebos, Reassurance, and Self-Compassion

Dr. Richard Hibbard

Placebo response to drug treatment of depression can be explained behaviorally in that pill taking becomes associated with the reassurance, the compassion and the hope that goes with being in treatment with a compassionate provider. Brain pathways for self-reassurance and self-compassion are the same ones used in response to other-reassurance and other-compassion. Pill taking becomes a stimulus for activating a common self-reassurance/self-compassion pathway and if done every day, becomes a repeated stimulus for activation of positive-affect brain pathways, which will bring about synaptic change over time, increasing the likelihood of continuing positive affect and lifting mood. Self-compassion has been found to be an adaptive, helpful emotion regulation strategy for depressed patients. Regular practice of self-compassion within the context of daily mindfulness may produce similar or even greater and longer lasting responses than medication for major depression. What remains unknown in drug treatment for depression is the proportion of improvement from the purely biochemical effect of the medication, so the jury is out on whether medications are truly helpful. Daily self-compassion based mindfulness costs less and has no side effects. On the basis of mirror neuron function, compassion-focused treatment is likely most effective in a group setting. The presentation will demonstrate how mindful self-compassion can be applied in closed group, open group, and individual treatment.

Learning Objectives:

At the end of this session participants will be able to:

1. Use behavioural theory to explain placebo response in medication treatment for depression;
2. Build upon this theory to create behavioural treatment strategies for depression; and
3. Describe ways of implementing self-compassion in everyday treatment for depression.

Literature References:

1. Geers AL, Miller FG (2014). Understanding and translating the knowledge about placebo effects: the contribution of psychology. *Curr Opin Psychiatry* 27(5), 326–331.
2. Diedrich A, Grant M, Hofmann SG, Hiller W, Berking M (2014). Self-compassion as an emotion regulation strategy in major depressive disorder. *Behav Res Ther* 58, 43-51

Saturday, March 21 | 14:30 | Hawthorn C

How Metaphor Creates an Environment Supporting Complex Adoptive Change in Psychotherapy

Dr. J. Rowan Scott

Metaphors are a central component of the narrative structure in psychotherapy. They arise from the emotional, conceptual and mentalizing process of the patient or therapist, from personal or cultural interaction, they emerge from attempts to understand past or recent history, they appear in imagination or dreams, or emerge in the inter-subjective space between patient and therapist. Metaphors are bivalent in their implication within development and the process of therapy. They can potentiate, aggravate or precipitate vulnerability and destabilize mental health, or they can be centrally involved in enhancing well-being and shifting the patient in the inter-subjective space of therapy toward resilience and sometimes very complex and positive adaptive change.

A range of metaphors are explored in this workshop, arising from imagination, dreams, the inter-subjective field of therapy, functional neuroimaging associated with the process of therapy or arising from interpersonal neuroscience. How can they be employed to enhance resilience and move away from vulnerability is explored.

Participants should gain a greater appreciation of how metaphor can adaptively assist in the development of resilient self-awareness, insight, self-regulation and affect regulation.

Learning Objective:

At the end of this session participants will be able to:

1. Use multiple forms of metaphor in psychotherapy.

Literature References:

1. Modell, Arnold: Imagination and the meaningful brain, MIT Press 2006

Saturday, March 21 | 14:30 | Bluebell

ADHD in Post-Secondary Students

Dr. Wallace Smart

A PubMed review was conducted for papers reporting on attention-deficit/hyperactivity disorder (ADHD) in post-secondary students. The review was performed in order to determine the prevalence and symptomatology of ADHD in post-secondary students to examine its effects on academic achievement and discuss appropriate management. The prevalence of ADHD symptoms among post-secondary students ranges from 2% to 12%. Students with ADHD have lower grade point averages and are more likely to withdraw from courses to indulge in risky behaviors and to have other psychiatric comorbidities than their non-ADHD peers. Ensuring that students with ADHD receive appropriate support requires documented evidence of impairment to academic and day-to-day functioning. In adults with ADHD, stimulants improve concentration and attention, although improved academic productivity remains to be demonstrated. ADHD negatively impacts academic performance in students and increases the likelihood of drug and alcohol problems. Affected students may therefore benefit from disability support services, academic accommodations and pharmacological treatment.

Learning Objectives:

At the end of this session participants will be able to:

1. Review the prevalence and symptomatology of ADHD in post-secondary students;
2. To examine the effects of ADHD on academic achievement; and
3. To discuss appropriate management.

Literature References:

1. Kevin Nugent, Wallace Smart. ADHD in post-secondary students. *Neuropsychiatric disease and treatment* 2014;10 1781–1791.

Saturday, March 21 | 14:30 | Yarrow

Feedback NOT Friendly Fire: Developing an Approach in Medical Education

Dr. Jordan S. Cohen
Dr. Pritpal Atwal
Dr. Sterling Sparshu

Introduction:

Feedback is an integral part of the medical profession. We are constantly giving and receiving feedback in our relationships within our healthcare teams and with patients and their families. As a part of the medical education process, trainees and teachers are regularly evaluated. Feedback is a necessary step in the education process. It enables a trainee to have their positive skills reinforced and to critically comment on the areas requiring improvement. If provided effectively and received openly, feedback allows for the greatest probability for a satisfactory evaluation.

Workshop Format:

This workshop learning will be a combination of both didactic (15 minute), large (15 minute) and small group teaching discussion (25 minutes). After first distinguishing feedback from evaluation and outlining different forms of feedback, the group will discuss their personal experiences and the roadblocks to providing feedback to others in medical education. The characteristics to effective feedback will be reviewed and smaller group work will be applied to developing wording to deliver empathic and critical feedback to both trainees and teachers, based upon the Royal College of Physicians and Surgeons of Canada's training roles (CanMEDS). All participants should leave this workshop with some practical approaches to providing and receiving feedback that will make this crucial process more effective in the future. Although the workshop is intended for medical education, these feedback discussions can apply to enhance feedback between physicians and allied health care staff to better improve communication and professionalism.

Learning Objectives:

At the end of this session participants will be able to:

1. Review the concept of feedback and ideas around providing effective feedback;
2. Discuss the challenges around providing/receiving feedback and review the feedback conversation; and
3. Develop an approach using a CanMEDS model to provide constructive feedback to trainees and teachers based on example scenarios.

Literature References:

1. Branch JR WT, Paranjape A. Feedback and reflection: teaching methods for clinical settings. Acad Med. 2002; 77:1185-8.
2. Cantillon P, Sargeant J. Giving feedback in clinical settings. BMJ. 2008; 337:1292-4.
3. Milan FB, Parish SJ, Reichgott MJ. A model for educational feedback based on clinical communication skills strategies: beyond the "feedback sandwich." Teach Learn Med. 2006; 18(1):42-7

Saturday, March 21 | 14:30 | Laurel

A Variant in COMT is Associated with Substance-Induced Psychosis

Dr. Katherine J. Aitchison
Dr. Carol Bolt
Dr. Darren Bugbee
Dr. Aleksandra Dimitrijevic
Dr. Beatriz Carvalho Henriques
Dr. Brodie A. Heywood

Dr. Alexandra Loverock
Dr. Georgina MacIntyre
Dr. Scot E. Purdon
Dr. David Rossolatos
Dr. Yabing Wang
Dr. Philip Tibbo

Cannabis use in young people is a known risk factor for the development of psychosis. A genetic variant in COMT (encoding catechol-O-methyltransferase, an enzyme that metabolises dopamine) has been associated with psychotic symptoms after adolescent cannabis use^{1, 2, 3}. We herein explore the role of this variant (which leads to a functional amino acid change, Val158Met) in a sample of 204 young people with psychosis recruited in Edmonton and Halifax. Data on cannabis use and other relevant variables were collected. DNA was extracted from salivary samples using Oragene kits.

Linear regression analysis showed that COMT genotype was not a significant predictor of age of onset of illness (log-transformed owing to skewed distribution) in the whole sample ($p=0.24$, $N=204$). However, for those with a diagnosis of schizophrenia spectrum disorder or substance-induced psychosis, there was a borderline significant p value ($p=0.056$, $N=139$), while, interestingly, COMT genotype was a significant predictor of log age at diagnosis ($p=0.046$) in the substance-induced psychotic disorder subsample ($N=44$).

We found an association between this COMT variant and age of onset of psychotic disorder in substance-induced psychosis. Ancestry informative markers are being genotyped in order to conduct principal components analysis (PCA) to see if there is more than one 'cluster' or ethnic group in the overall sample and, if so, to factor in the cluster group into the analysis.

Funding: Canadian Institutes of Health Research (CIHR, NPAS3 variants in schizophrenia and other psychoses); Alberta Centennial Addiction and Mental Health Research Chair fund held by KJA.

Learning Objectives:

At the end of this session participants will be able to:

1. Understand better the role of cannabis in the genesis of psychosis;
2. Be familiar with the role of a genetic variant in affecting this process; and
3. Conduct more informed dialogue with their patients about this process.

Literature References:

1. Caspi A, Moffitt TE, Cannon M, McClay J, Murray R, Harrington H, Taylor A, Arseneault L, Williams B, Braithwaite A, Poulton R, Craig IW. Moderation of the effect of adolescent-onset cannabis use on adult psychosis by a functional polymorphism in the catechol-O-methyltransferase gene: longitudinal evidence of a gene X environment interaction. *Biol Psychiatry*. 2005 May 15;57(10):1117-27.
2. Henquet C, Rosa A, Krabbendam L, Papiol S, Fananas L, Drukker M et al. (2006). An experimental study of catechol-O-methyltransferase Val158Met moderation of delta-9-tetrahydrocannabinol-induced effects on psychosis and cognition. *Neuropsychopharmacology* 31: 2748–2757.
3. Hides L, Lubman DI, Buckby J, Yuen HP, Cosgrave E, Baker K et al. (2009). The association between early cannabis use and psychotic-like experiences in a community adolescent sample. *Schizophr Res* 112: 130–135.

Increased Bone Stability in an Aripiprazole Add-On or Switching Study

Dr. Rohit Lodhi
Dr. Katherine J Aitchison
Dr. Victoria DM McAllister
Dr. Amna Mir

Dr. Veronica O'Keane
Dr. Kuppuswami Shivakumar
Dr. Leah C. Young

Schizophrenia is associated with high rates of osteoporosis and reduced bone mineral density[1]. Prolactin-raising anti-psychotics are independently associated with hip fractures[2] and bone pathology[3]. We aim to determine if aripiprazole-induced reductions in prolactin levels translate to changes in markers of bone resorption/formation by adding or replacing an existing anti-psychotic with aripiprazole.

An aripiprazole add-on/switching study was conducted in twenty-eight schizophrenia patients on another anti-psychotic medication[4]. Baseline and serial measurements of bone markers type I collagen cross-linked N-telopeptide (NTXC) and bone-specific alkaline phosphatase (BSAP) and of hormones prolactin, estrogen and testosterone were done at weeks 0 and 1, 2, 6, 12, 26 and 52 respectively. Statistical analysis was done using the GEE method.

The add-on or switch to aripiprazole caused a significant reduction in prolactin ($\beta = -3.624$, $P = 0.002$) and BSAP ($\beta = -0.118$, $P = 0.008$) while the NTXC level reduction was close to significance ($\beta = -0.20$, $P = 0.070$). Baseline medication, ethnicity and switch status (add-on or switch to aripiprazole) were significant factors affecting change in NTXC. Subgroups of patients who were switched from olanzapine ($\beta = -0.415$, $P = 0.015$) switched completely to aripiprazole ($\beta = -0.499$, $P = 0.031$) or of black ethnicity ($\beta = -352$, $P = 0.040$) had a significant reduction in NTXC.

Replacing prolactin-elevating anti-psychotics with aripiprazole can reduce a marker of bone resorption in schizophrenia patients.

Learning Objectives:

At the end of this session participants will be able to:

1. Understand research about the addition or replacement of other anti-psychotics with aripiprazole on a bone stability marker;
2. Be more aware of the need for advocating better monitoring of bone health in patients on anti-psychotics; and
3. Include consideration for effect on bone density when discussing medication options with their patients.

Literature References:

1. Kishimoto, T., et al., Osteoporosis and fracture risk in people with schizophrenia. *Curr Opin Psychiatry*, 2012. 25(5): p. 415-29.
2. Howard, L., G. Kirkwood, and M. Leese, Risk of hip fracture in patients with a history of schizophrenia. *Br J Psychiatry*, 2007. 190: p. 129-34.
3. O'Keane, V. and A.M. Meaney, Anti-psychotic drugs: a new risk factor for osteoporosis in young women with schizophrenia? *J Clin Psychopharmacol*, 2005. 25(1): p. 26-31.
4. Mir, A., et al., Change in sexual dysfunction with aripiprazole: a switching or add-on study. *J Psychopharmacol*, 2008. 22(3): p. 244-53.

Resident Presentations

Saturday, March 21 | 13:30 | Salon C

Fatigue Risk Management Amongst University of Calgary Resident Physicians

Dr. Kimberly Williams
Dr. Natalia Jaworska



Resident fatigue has been cited as one of many factors that contribute to errors in the healthcare setting. The definition of fatigue is extreme tiredness resulting from mental or physical illness. Chronic sleep loss adversely affects mood, personal relationships and perceived quality of life. The impact of emotional, mental and motivational fatigue on resident performance is not well characterized in the literature. Further data is required in order to better elucidate the contribution of these forms of fatigue to the resident experience of fatigue and its contribution to job performance, cognition and medical errors.

Data was collected in January 2015. A validated survey to identify the perceived impact of various aspects of fatigue was conducted with University of Calgary residents of various specialties. Then explanatory focus groups were conducted. The focus group data was transcribed and then analyzed using thematic analysis. The questionnaire was analyzed using a mixture of parametric and nonparametric tools including both descriptive analysis and multivariate regression.

The objectives of the study are to a) collect baseline data on how residents identify and manage fatigue, b) assess the perceived effectiveness of programs in identifying and managing resident fatigue, c) explore how residents help their colleagues with fatigue and d) elucidate which aspects of fatigue are the greatest contributors to overall resident fatigue.

To date, there has been no prior qualitative assessment of Alberta resident physicians regarding fatigue and fatigue management. The data has implications for improved resident mental health.

Learning Objectives:

At the end of this session participants will be able to:

1. Recognize how residents identify and manage fatigue;
2. Understand how residents perceive that residency programs identify and manage fatigue, as well as how they help colleagues with fatigue; and
3. Advocate for resources necessary for improving resident mental health.

Literature References:

1. National Steering Committee on Resident Duty Hours. Fatigue, risk and excellence: towards a pan-Canadian consensus on resident duty hours. June 2013.

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7. Feddock, CA. et al. Do pressure and fatigue influence resident job performance? *Med Teacher* 2007; 29: 495-497.
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Violent Video Games: Fostering Aggressive, Antisocial and Destructive Behaviour?

Dr. Marko Tymchak

Are combat, crime and confrontation-themed video games a form of allowed violence and virtual bullying? Do they encourage and normalize aggressive behaviours? Or are they simply a virtual reality puzzle and a form of benign catharsis?

An issue of increasing societal concern is the impact that video games with violent themes have on child and adolescents' social behaviour and cognitive development. Studies to date that investigate video games and violence have shown mixed results; some supporting while others refuting any correlation between the two. Professionals in psychology, psychiatry, media regulation and government committees are involved in trying to identify the nature of the relationship.

The issue is far from small: it has been touched on in political campaigns and in large scale lawsuits against video game producers by victims of school shootings. The control of video game content has even gone before Supreme Courts. From a cultural standpoint, the momentum and dominance of video gaming is impressive. In North America, nearly two-thirds of households play video games with gaming reaching \$20 billion in revenue (\$80 billion worldwide). The increasing realism - close to visuals seen in movies - is reminiscent of simulation and virtual reality. An insatiable appetite seems to exist with producers and gamers alike for games that push the envelope with extreme and controversial content. As it is unlikely engagement will subside, it will be increasingly valuable to anticipate and intercept potential negative influences, while taking advantage of gaming's positive aspects.

What follows is an examination of the research so far, theories regarding gaming and its impact on behaviour, potential benefits of video gaming and growing ideas of how to further identify potential effects.

Learning Objectives:

At the end of this session participants will be able to:

1. Become aware of current state of literature on the impact video games have on influencing aggressive and violent behavior;
2. Overview of theories on the mechanism of video games' effects on cognition and behaviour; and
3. Become aware of benefits seen in cognition and behavior as a result of video games.

Literature References:

1. ESRB.org
2. Anderson C. and Bushman B. "Effects of violent video games on aggressive behavior, aggressive cognition, aggressive affect, physiological arousal, and prosocial behavior: A meta-analytic review of the scientific literature." *Psychological Science* 2001 12(5) p353 - 359.
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Saturday, March 21 | 13:50 | Salon C

Glycine Reuptake Inhibitors in the Treatment of Negative Symptoms of Schizophrenia

Dr. Reji Thomas
Dr. Baker, G.
Dr. Chue, J.

Dr. Chue, P.
Dr. Dursun, S.
Dr. Dhami, K.



Negative symptoms persist in over one quarter of schizophrenics and are detrimental to prognosis, functionality and quality of life. Currently, there are no adequate treatments for primary negative symptoms. However, enhancing N-methyl-D-aspartate receptor hypofunctioning with glycine reuptake inhibitors have garnered a lot of optimism as a potential new treatment. Sarcosine derivative trials have yielded mixed results and potential severe side effects have halted progress to larger studies. Non-sarcosine derivatives (particularly, bitopertin) have proven to be less toxic and have shown success in phase II trials. Unfortunately, phase III trials to date have not met primary endpoints and a void in effective treatment options for negative symptoms persists. Further research to improve psychiatric study design discover clinical biomarkers and build on early successes of other potential pharmacologic molecules is required.

Learning Objectives:

At the end of this session participants will be able to:

1. Describe the merits of the glutamatergic hypothesis to schizophrenia;
2. Identify glycine reuptake inhibitors (GRIs) as one of the promising novel treatments for negative symptoms of schizophrenia; and
3. Review the current results of trials in the treatment of negative symptoms with focus on GRIs.

Literature References:

1. Chue P, Baker G. Glycine reuptake inhibition: A promising therapeutic strategy in the treatment of schizophrenia. *Future Med Chem* 2013; 5:1475-1477.
2. Chue P, Lalonde JK. Addressing the unmet needs of patients with persistent negative symptoms of schizophrenia: Emerging pharmacological treatment options. *Neuropsychiatr Dis and Treat* 2014; 10:777-789.

Saturday, March 21 | 13:50 | Hawthorn A

Combination of Clozapine with Long Acting Injectable Anti-Psychotics in Treatment-Resistant Schizophrenia: Preliminary Evidence from Health Care Utilization Indices

Dr. Rachel Grimminck, MD
Dr. Manvir Bal, BA
Dr. Toba Oluboka, MD, FRCPC

Dr. Donna L. Rutherford, BSc
Dr. Tolulope Sanjobi, Ph.D.
Dr. Helen Yeung, MD, FRCPC



Clozapine is indicated for Treatment-Resistant Schizophrenia (TRS), yet only 30-60% of patients will respond to optimum treatment. There have been studies of clozapine augmentation with oral second generation anti-psychotics (SGA) with mixed results, but no studies considering the combination with long acting injectable (LAI) anti-psychotics. This study attempts to establish the efficacy of the combination of clozapine and LAI anti-psychotics in TRS.

A mirror-image study design was employed to review health care utilization measures two years pre and post-combination of clozapine with a LAI (either first generation anti-psychotic (FGA) or SGA) in a small sample of patients (N=20) with chronic psychotic disorders followed by the Assertive

Community Treatment service in Calgary, Alberta.

Paired sample t tests showed a statistically significant reduction in average ED visits in the two years post-combination with an average 1.8 fewer ED visits (95%CI = [0.58 to 3.02], $p=0.024$). There was also a statistically significant reduction in number of hospital admissions in the two year post-combination with a mean reduction of 0.85 admissions (95%CI = [0.36 to 1.34], $p=0.008$). There was no statistically significant reduction in hospital bed days between pre and post-combination.

The combination of clozapine and a long acting injectable anti-psychotic appears to reduce health care utilization in terms of ED visits and number of hospital admissions. Future research will investigate the effects of this combination on psychopathology and health related quality of life outcomes in this patient population.

Learning Objectives:

At the end of this session participants will be able to:

1. To review the evidence for different augmentation strategies for patients with treatment-resistant schizophrenia and a partial response to clozapine; and
2. To learn about preliminary findings from a study on the efficacy of the combination of clozapine and a long acting injectable anti-psychotic in treatment-resistant schizophrenia.

Literature References:

1. Canadian Psychiatric Association. Clinical practice guidelines treatment of schizophrenia. Can J Psychiatry 2005;50(13):S1-59.
2. Cipriani A, et al. Clozapine combined with different anti-psychotic drugs for treatment resistant schizophrenia. Cochrane Database Systematic Rev 3 2009: CD006324. DOI: 10.1002/14651858.CD006324.pub2.
3. Kishimoto T, et al. Long-acting injectable versus oral anti-psychotics in schizophrenia: a systematic review and meta-analysis of mirror-image studies. J Clin Psychiatry 2013 Oct; 74(10):957-65.

Saturday, March 21 | 14:10 | Salon C

The Role of Pharmacological Agents with Anti-Inflammatory Properties in the Treatment of Major Depressive Disorder

Dr. Catherine Cheng
Dr. Glen Baker
Dr. Natasha Snelgrove



The monoaminergic hypothesis of neurotransmitter dysregulation in the understanding of major depressive disorder (MDD) has been largely replaced with a poly-pathogenic model consisting of multiple mediators and modulators. Evidence suggests that inflammation is a key mediator in the development of MDD. One potential mechanism of action is the release of inflammatory cytokines, which has been supported by elevated levels of inflammatory cytokines including IL-6, IL-1b and TNF- α , found repeatedly in MDD.

The objective of this review is to explore current evidence regarding novel treatments and therapies for managing depression in the context of inflammation and cytokines.

Growing evidence exists to support the role of inflammation in depression. Current anti-depressants, particularly selective serotonin reuptake inhibitors and tricyclic anti-depressants appear to demonstrate potential anti-inflammatory properties. Reports on the findings of anti-inflammatory agents such as non-steroidal anti-inflammatory drugs and direct cytokine-inhibitors on depressive symptoms are mixed, although they may show some promise in sub-segments of the population. Preliminary research suggests that there may also be a role for novel agents such as minocycline, omega-3 diet supplementation and curcumin in the management of depressive symptoms in the context of inflammation.

Thus, current research presents a novel approach to further understanding the effects and mechanisms of action of current anti-depressants in the context of inflammation. Opportunities exist for novel treatment agents for depression on the basis of anti-inflammatory properties.

Learning Objectives:

At the end of this session participants will be able to:

1. Provide a general overview of the potential linkage between inflammatory cytokines and major depressive disorder;
2. Review current understanding and potential mechanisms of action of anti-depressants in the context of inflammation; and
3. Explore current evidence and potential of novel treatments for MDD, including anti-inflammatory agents, minocycline, and nutritional supplementation.

Literature References:

1. Abelaira HM, Réus GZ, Petronilho F, Barichello T, Quevedo J. Neuroimmunomodulation in depression: a review of inflammatory cytokines involved in this process. *Neurochem Res.* 2014; 39(9):1634-9.
2. Köhler O, Benros ME, Nordentoft M, Farkouh ME, Iyengar RL, Mors O, Krogh J. Effect of anti-inflammatory treatment on depression, depressive symptoms, and adverse effects: A systematic review and meta-analysis of randomized clinical trials. *JAMA Psychiatry.* 2014;71(12):1381-91.
3. Young JJ, Bruno D, Pomara N. A review of the relationship between proinflammatory cytokines and major depressive disorder. *J Affect Disord.* 2014;169:15-20.

Saturday, March 21 | 14:10 | Hawthorn A

Depression as a Predictor of Survival, Post-Operative Treatment Adherence and Post-Operative Functional Performance in Head and Neck Cancer

Dr. Jace Dergousoff, MD

Dr. Brittany Barber, MD

Head and neck cancer (HNC) is a debilitating disease due to the de-humanizing nature of the symptoms. The incidence of depression in HNC patients has been reported to be approximately 40%¹. Depressive symptoms may affect patients' abilities to function post-operatively.

Study 1

A prospective cohort study was conducted at the UAH HNC practice to investigate the relationship between pre-operative depressive symptoms (PDS) and post-operative functional performance status (PFPS). Baseline depressive symptoms were measured on 38 new HNC patients at the UAH using the quick inventory of depressive symptoms (QIDS) 2 weeks pre-operatively and 6 months post-operatively. The rate of depressive symptoms was 58.3%. The moderate-severe QIDS group demonstrated lower completion of adjuvant therapy ($p=0.037$), higher rate of narcotic dependence and higher rate of return to detrimental habits ($p=0.032$).

Study 2

A systematic review was completed to investigate the relationship between the development of depressive symptoms during treatment for HNC and survival. A literature search resulted in 456 articles, which were reviewed by two independent reviewers. A forest plot was constructed using five of the seven relevant articles and demonstrated a non-significant trend toward association of depression and survival in HNC patients ($p=0.09$).

Overall Conclusions: The rate of depressive symptoms in HNC patients treated with surgery is high (58.3%) and has detrimental effect on PFPS, narcotic use, return to detrimental habits and rate of completion of adjuvant therapy. An association between depression and survival in HNC patients is apparent, however the strength and etiology of this association is not clear.

Learning Objectives:

At the end of this session participants will be able to:

1. Have an appreciation of the high incidence of depression in head and neck cancer patients undergoing surgery;
2. Understand pre-operative depressive symptoms contribute negatively to post-operative functional performance, return to detrimental habits and completion of adjuvant therapies; and
3. Appreciate that, though depressive symptoms can impact post-operative compliance, additional research is needed to evaluate the impact on overall survival.

Literature References:

1. Sehlen S, Lenk M, Herschback P, et al. Depressive symptoms after radiotherapy for head and neck cancer. *Head Neck* 2003;25:1004-1018.

Who Wants to Get Sued? An In-Depth Analysis of Complaints Against Psychiatrists in Alberta from 1990 - 2013

Dr. Raheel Syed

Little is known about the details of complaints facing psychiatrists in Alberta and how they compare to other medical specialties.

Data was collected from the College of Physicians and Surgeons of Alberta (CPSA) complaints database for the years 1990 to 2013. Collected data included: number of complaints, percentage of psychiatrists with complaints, age distribution, years since graduation and nature and resolution of complaints. These data were compared to the combined data collected for most other medical specialties.

The number of complaints against psychiatrists has remained steady over the past 10 years. Psychiatrists tend to have a higher percentage of complaints (8.4%) in comparison to all other physicians combined (5.9%). Age distribution demonstrates percentage of physicians receiving complaints increases with age. Psychiatrists between the ages of 41 and 55 tend to have the highest percentage of complaints. In the first five years of unsupervised practice, psychiatrists tend to have almost no complaints (0.9%). Most common complaints against psychiatrists are related to treatment (36.0%), attitude (16.9%) and incorrect diagnosis (7.0%). In the time period studied, the vast majority of complaints against psychiatrists were dismissed (79.9%); in comparison, 55.2% of complaints against all other physicians combined were dismissed. Only 0.9% of complaints against psychiatrists resulted in a restricted practice license, in comparison to 1.6% for all other physicians combined.

Psychiatrists receive more complaints than other specialties, but most of the complaints are also dismissed. However, strategies still need to be developed to continually address common complaint areas that will help improve the quality of care provided to patients.

Learning Objectives:

At the end of this session participants will be able to:

1. Understand why it is important to look at the complaints data;
2. Have an appreciation of the limited data available on this topic;
3. Understand the basics of how the complaints process works at the CPSA (College of Physicians and Surgeons of Alberta);
4. Understand the characteristics of psychiatrists at greatest risk to receive complaints; and
5. Identify the nature of complaints and how they are resolved.

Literature References:

1. Bauer, A., Rosca, P., Grinshpoon, A., Khawaled, R., & Mester, R. (2003). [Complaints in mental health services in Israel: a one year-study]. *Harefuah*, 142(5), 332-335, 399.
2. Haw, C., Collyer, J., & Sugarman, P. (2010). Patients' complaints at a large psychiatric hospital: can they lead to better patient services? *Int J Health Care Qual Assur*, 23(4), 400-409.
3. Ingram, K., & Roy, L. (1995). Complaints against psychiatrists: a five year study. *Psychiatric Bulletin*, 19(10), 620-622.
4. Khaliq, A. A., Dimassi, H., Huang, C. Y., Narine, L., & Smego, R. A., Jr. (2005). Disciplinary action against physicians: who is likely to get disciplined? *Am J Med*, 118(7), 773-777. doi: 10.1016/j.amjmed.2005.01.051
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7. Slawson, P. F., & Guggenheim, F. G. (1984). Psychiatric malpractice: a review of the national loss experience. *Am J Psychiatry*, 141(8), 979-981.

Current Knowledge of Children's Understanding of Death and Dying

Dr. Katherine Fleming, MD

Dr. Waqar Waheed, MD, FRCPC, DABPN



Much has been studied and written about how children and young people experience major losses and how they make sense of death and dying at various ages. There have been differing methods used by researchers to categorize young people's understanding of death. Some researchers have taken a strictly cognitive approach while others have delved into the more nebulous but fruitful exploration of spiritual, emotional or religious themes. This study aims to summarize the most up-to-date knowledge of what children know and how children understand death and dying by reviewing recently published articles on the topic and summarizing these findings in a narrative review.

Nine online databases were searched with only the most recent papers being included, from (2011 to 2014). 186 articles met our criteria. Of these, 17 were chosen to be included in the final review.

The level of understanding of death and dying is correlated with the child's stage of cognitive development, familial unit, cultural background, and religious/spiritual milieu, as well as prior experience with the loss of a loved one.

From a young age, children are aware of death through various forms of media and personal experience and are naturally curious about it. Therefore, elementary school students would benefit from enhanced education practices related to death, dying and loss.

Learning Objectives:

At the end of this session participants will be able to:

1. Describe the different stages of cognitive development in young children;
2. Relate how these different stages of development contribute to children's understanding of death and dying; and
3. Recognize how the interaction of various bio-psycho-social factors influence children's appreciation of death and dying.

Literature References:

1. Abras, M. (2013). An approach to educating children about death. *European Journal of Palliative Care*, 20(2), 82-84.
2. Bonoti, F., Leondari, A., & Mastora, A. (Jan 2013). Exploring children's understanding of death: Through drawings and the death concept questionnaire. *Death Studies*, 37(1), 47-60.
3. Callanan, M. A. (Mar 2014). Diversity in children's understanding of death. *Monographs of the Society for Research in Child Development*, 79(1), 142-150.
4. Coombs, S. (2014). Death wears a T-shirt – listening to young people talk about death. *Mortality*, 19(3), 284-302..
5. Engarhos, P., Talwar, V., Schleifer, M., & Renaud, S. (2013). Teachers' attitudes and experiences regarding death education in the classroom. *Alberta Journal of Educational Research*, 59(1), 126-128.
6. Fleischman, J. G. (2013). Students anticipating the death of a family member or loved one. In E. Rossen, & R. Hull (Eds.), *Supporting and educating traumatized students: A guide for school-based professionals* (pp. 139-154). New York, NY, US: Oxford University Press; US.
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- Vannatta, K. (Mar 2012). Peer relationships of bereaved siblings and comparison classmates after a child's death from cancer. *Journal of Pediatric Psychology*, 37(2), 209-219.
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 10. Hilliker, L. (2013). An enlightened (and relieved) death education: The value of truth telling with children. *Illness, Crisis, & Loss*, 21(4), 361-364.
 11. Jackson, M. J. (2013). Children grief and the understanding of death. In S. Kreitler, & H. Shanun-Klein (Eds.), *Studies of grief and bereavement* (pp. 129-140). Hauppauge, NY, US: Nova Science Publishers; US.
 12. Lee, Ji SeongKim, Eun YoungChoi, YounyoungKoo,Ja Hyouk. (2014). Cultural variances in composition of biological and supernatural concepts of death: A content analysis of children's literature. *Death Studies*, 38(8), 538-545.
 13. McGuire, S., L., McCarthy, L., S., & Modrcin, M., Anne. (2013). An ongoing concern: Helping children comprehend death. *Open Journal of Nursing*, 3(3), 307-313.
 14. Miller, P. J., Rosengren, K. S., & Gutierrez, I. T. (Mar 2014). Children's understanding of death: Toward a contextualized and integrated account: I. introduction. *Monographs of the Society for Research in Child Development*, 79(1), 1-18.
 15. Miller, P. J., & Rosengren, K. S. (Mar 2014). Children's understanding of death. Toward a contextualized and integrated account: VII. final thoughts. *Monographs of the Society for Research in Child Development*, 79(1), 113-124.
 16. Rosengren, K. S., Gutierrez, I. T., & Schein, S. S. (Mar 2014). Children's understanding of death: Toward a contextualized and integrated account: IV. cognitive dimensions of death in context. *Monographs of the Society for Research in Child Development*, 79(1), 62-82.
 17. Rosengren, K. S., Gutierrez, I. T., & Schein, S. S. (Mar 2014). Children's understanding of death: Toward a contextualized and integrated account: V. cognitive models of death. *Monographs of the Society for Research in Child Development*, 79(1), 83-96.

Saturday, March 21 | 14:50 | Salon C

A Retrospective Study on Absconding Patients from a Psychiatric Hospital in Alberta, Canada

Dr. Dharini Maheswaran

Psychiatric wards are at significant risk of patient absconding. This can be associated with serious risk of patient harm to self and the wider community. Moreover, patient absconding is associated with significant economic, social, and emotional burden. Though there are studies on the issue of absconding in various countries including the UK, Iran and Australia, there is limited data on a Canadian population.

Aims and Objectives:

Examine the event of patients absconding from a unit within a psychiatric hospital (Alberta Hospital Edmonton) in Edmonton, Alberta, Canada.

This study is a retrospective descriptive analysis.

Data was collected of all absconders from one unit of a psychiatric hospital over a one-year period. This data, as well as documentation surrounding each event, was studied.

Based on the current literature on psychiatric patients absconding from hospital, we expect that patient characteristics including being male, single, middle-aged, and having psychosis as a primary diagnosis would place patients at increased risk of absconding from the hospital.

Relevance to Clinical Practice:

Given the significant risk and cost associated with psychiatric patient absconding, it is important to identify the factors related to its occurrence. These findings may aid risk management protocol within a psychiatric setting to prevent its occurrence, protect patient and community safety, and prevent associated financial, social and emotional consequences.

Learning Objectives:

At the end of this session participants will be able to:

1. Explore current literature related to psychiatric patients absconding and identify trends and common findings amongst differing populations;
2. Identify the characteristics of patients who abscond from a psychiatric hospital in Alberta, Canada, based on a retrospective analysis of over a one-year time period; and
3. Discuss reasons for and risk factors associated with patient absconding in relation to current and future risk management protocol.

Literature References:

1. Carr VJ, Lewin TJ, Sly KA, Conrad AM, Tirupati S, Cohen M, Ward PB, Coombs T. Adverse incidents in acute psychiatric inpatient units: Rates, correlates and pressures. *Aust N Z J Psychiatry* 42, no. 4 (2008): 267-82.
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3. Yasini M, Sedhaghat M, Ghasemi Esfe R, Tehranidoost M. Epidemiology of absconding from an Iranian Psychiatric Centre *Journal of Psychiatric and Mental Health Nursing*. no. 16 (2009): 153-157

Saturday, March 21 | 14:50 | Hawthorn A

Clinical Complexities of FTD: Overlapping Neurological Disease and the Role of the C9ORF72 Gene Mutation

Dr. Sarah Tymchuk

Frontotemporal dementia (FTD) is the second most common dementiform illness in individuals younger than 65 years of age.¹ FTD is a spectrum of heterogeneous disorders with variable yet overlapping clinical, neuropathic and genetic presentations.^{1, 6, 7} Currently FTD is comprised of three distinct clinical syndromes: behavioural variant FTD and the language variants known as semantic aphasia and primary progressive aphasia. Behavioural variant (bvFTD) is the most prevalent subtype responsible for 70% of FTD diagnoses.^{1, 6, 7}

Clinically, bvFTD presents with marked behavioural changes, social dysfunction and diminished executive functioning. In particular poor judgment, increased impulsivity, obsessive behaviours and sexual aggression are common. Changes in these domains tend to occur early in the course of the disease with significantly impaired patient insight. Progression of the illness frequently results in cognitive impairment.

Further to this, FTD frequently overlaps with specific neurodegenerative illnesses including atypical parkinsonian disorders such as corticobasal syndrome (CBS) and progressive supranuclear palsy (PSP) as well as motor neuron disease, notably ALS.⁴ When occurring together these are referred to as frontotemporal lobar degeneration. These FTLD disorders share not only common neuropathological components but recent literature demonstrates several common gene mutations which have been identified.^{5, 8} Of the known mutations the C9ORF72 mutation is the most frequent genetic cause of FTD and FTD-MND.^{1, 5, 8} Such patients frequently present as primarily psychiatric, either with prominent mood symptoms or psychosis, with a notable absence of neurological signs.⁸ Consequently, knowledge of these complex clinical syndromes is an important component of current psychiatric practice.

My presentation will provide a review of the recent FTD literature emphasizing the overlap with neurological disorders particularly on those variants known to have the C9ORF72 mutation and their complex clinical presentations.

Learning Objectives:

At the end of this session participants will be able to:

1. Distinguish between three main FTD variants;
2. Appreciate the overlap of FTD with atypical parkinsonian syndromes and motor neuron disease and the underlying genetic mutations; and
3. Recognize psychosis as a common presenting clinical picture in FTD.

Literature References:

1. Pan XD and Chen XC. Clinic, neuropathology and molecular genetics of frontotemporal dementia: a mini-review. *Transl Neurodegener.* 2013; Apr 19;2(1):8
2. Gramaglia et al. Early onset frontotemporal dementia with psychiatric presentation due to the C9ORF72 hexanucleotide repeat expansion: a case report. *BMC Neurology.* 2014;14:228

Saturday, March 21 | 15:10 | Salon C

Psychiatric Consultations in the Pediatric Emergency Department: A Retrospective Analysis of Consultation Characteristics Over a 12-Month Period at the Stollery Emergency Department in Edmonton, Alberta

Dr. Gloria Lee
Dr. Lindy VanRiper

Mental health-related presentations to the Stollery pediatrics emergency department in patients under the age of 18 have increased from an annual rate of 80 per year in 2004, to 399 in 2013 (EDIS 2014). The pediatric emergency psychiatry service has moved on-site to this centrally located hospital starting at the end of February 2014, staffed by mental health nurses, a day-time staff psychiatrist, and after-hours care by psychiatric residents on a child and adolescent psychiatry rotation. This study aims to examine the characteristics of the consultations that this team is asked to evaluate from a period of the end of February 2014 to 2015.

This retrospective analysis examines emergency records to explore the frequency of presentations with particular working diagnoses and how they are assessed and managed by the different members of the psychiatric emergency psychiatry service. The data is broken down into primary age groups: under 5, 5 to 12, 13 to 16, and 17-year-old patients; and into male vs. female. In addition, we will take a look at the frequency of consults from particular referral sources, including direct-to-emergency-consultations from rural areas, other hospitals within the city of Edmonton, Mental Health Act certificates, and of course, from the pediatric emergency physicians. The frequency of admission to an in-patient unit is also calculated in relation to particular reasons for consultation.

A brief examination of current literature will explore the factors that contribute to a mental health emergency room presentation, including parental style, school calendar, and characteristics of multiple-time presenters.

Learning Objectives:

At the end of this session participants will be able to:

1. Appreciate the frequency and nature of emergent psychiatric consultation in the ER;
2. Understand the utilization of a multi-disciplinary team approach;
3. Recognize emergent trends in psychiatric consultation; and
4. Recognize the challenges special populations of patients generate in the ER.

Literature References:

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Temperamental Tides: Suicidality in Borderline Personality Disorder

Dr. Olivia Duffy



Borderline Personality Disorder (BPD) is the most widely studied personality disorder. It is characterized by a pervasive pattern of instability of interpersonal relationships, self-image, and affect as well as impulsivity. The median population prevalence is estimated to be between 1 and 2% and lifetime prevalence may be as high as 5.9%. It is associated with significant morbidity and mortality and a substantial economic cost. Perhaps one of the most unsettling features of this disorder is the propensity for recurrent suicidal threats and gestures and self-harm behavior; these pose important clinical and medicolegal challenges to psychiatrists. Completed suicide occurs in approximately 8-10% of patients and recurrent suicidality is a common reason for presentation to a health care setting.

Indeed, psychiatry is frequently called for what is colloquially referred to as a “Borderline Crisis.” The risk of self-harm and suicide is dynamic and fluctuates over time, and threats should always be taken seriously. Even at the best of times, this can be challenging and exhausting. Psychiatry residents should be well-versed in assessing and managing any patient’s risk of suicide and should appreciate the unique factors that apply to patients with BPD. Though predicting suicide is difficult (if not impossible), a review of the literature on high-risk features unique to BPD and a review of up-to-date guidelines on how to assess suicidality in BPD could assist physicians and residents in safely managing borderline patients in crisis.

Learning Objectives:

At the end of this session participants will be able to:

1. Review up-to-date literature on predictors and high risk features of suicide completion in BPD;
2. Be aware of current Clinical Practice Guidelines for managing suicidality in patients with BPD; and
3. Develop an evidence based approach for the assessment of suicidality in BPD patients to help guide management.

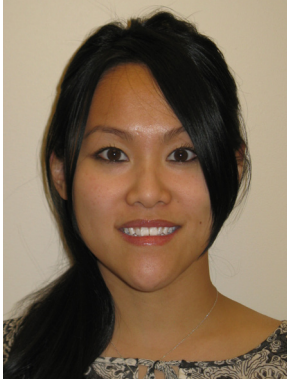
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Psychobiotics: Probiotics as an Adjunctive Treatment to Depression

Dr. Andrea Yu



Depression is known to be associated with immunological abnormalities, including impaired cellular immunity with lymphocytes producing neuromodulators and cytokines. In fact, higher levels of inflammation appear to increase the risk for the development of depression. For example, studies demonstrate endotoxin infusions in healthy patients trigger the release of cytokines and classical depressive symptoms emerge. Intriguingly, anti-depressants exert significant negative immuno-regulatory effects, decreasing the overall production of pro-inflammatory cytokines.

If depression results from an inflammatory response, what are the sources of this inflammation? Literature has suggested there may be many factors including poor diet, altered gut permeability and an alteration in the microbiota.

This presentation focuses on the gut, examining a comprehensive review provided by Dinan et al., who examines the microbiome-gut-brain axis and summarizes the evidence for the anxiolytic and anti-depressant action of probiotics (live bacteria that help maintain a healthy digestive system) in rodents and humans. Dinan et al. proposed the term “psychobiotic” for single bacterial species with psychotropic properties. Psychobiotics are thought to have the potential to increase microbial diversity and treat the symptoms of depression, possibly by producing and delivering neuro-active substances such as gamma-aminobutyric acid (GABA) and serotonin, which act on the brain-gut axis. Data supports the notion that nurturing gut bacteria may reduce circulating levels of pro-inflammatory cytokines and also improve mood. Furthermore, if probiotics are effective, it may offer an alternative treatment option particularly for patients that are reluctant to take anti-depressants.

Learning Objectives:

At the end of this session participants will be able to:

1. Have a basic understanding of how inflammatory processes may contribute to depression;
2. Identify factors that increase the risk for systemic inflammation and the development of depression; and
3. Consider the role of probiotics as an adjunctive treatment for depression.

Literature References:

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Vitamin B12 Deficiency: A Case Report and Review of Neuropsychiatric Consequences

Dr. Rita Watterson
Dr. Alexander Leung

Dr. Rup Pandya
Dr. Luke Rannelli

Vitamin B12 is essential for normal blood synthesis and neurological function. Vitamin B12 deficiency may cause megaloblastic anemia, subacute combined degeneration of the cord and psychiatric illness. We will describe an unusual case of a patient with severe vitamin B12 deficiency together with profound hematological derangements and florid neuropsychiatric impairment who presented to a local community hospital with repeated falls, dizziness, weight loss, fatigue and irritability.

Vitamin B12 deficiency is a common condition amongst our population and the neuropsychiatric presentations associated with it can be quite varied. Thus, screening, reference ranges and biochemical markers are quite widely debated within the literature, leading to difficulties in determining abnormalities. Identified risk factors and epidemiological trends can help us identify at-risk groups, but current literature is unclear of screening and treatment guidelines for our patients. These issues and pertinent psychiatric presentations will be discussed in the second half of the presentation.

Learning Objectives:

At the end of this session participants will be able to:

1. Understand the hematological, neurologic and psychiatric presentations of vitamin B12 deficiency;
2. Understand the sources of vitamin B12 deficiency;
3. Understand the risk factors and epidemiology of vitamin B12 deficiency; and
4. Understand the psychiatric screening and treatment of vitamin B12 deficiency.

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Exhibitor List

Registration #6

Alberta Psychiatric Association Foundation #5

www.albertapsych.org

The APA Foundation was created in 2008 to raise funds for education and research in the field of mental health. Your donations will help the APA Foundation bring noted speakers to present at future APA conferences while still keeping registration fees low so as to encourage full industry participation and education.

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Lundbeck Canada is a subsidiary of H. Lundbeck A/S, an international research-based pharmaceutical company which focuses on diseases of the central nervous system and most recently, oncology. Based in Montreal, Lundbeck Canada has been part of the Canadian pharmaceutical industry for more than a decade and markets products for the treatment of depression, anxiety, Alzheimer's disease, schizophrenia, bipolar disorders, and a product for the treatment of chronic lymphocytic leukemia and non-Hodgkin lymphoma. Through original research and development, as well as in-licensing agreements with other companies, we are fulfilling our mission to improve the quality of life for those suffering from psychiatric and neurological disorders.

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Owned by the Canadian Medical Association, MD Financial Management has an unrivalled understanding of the financial needs of Canadian physicians. MD uses this unique insight to deliver unbiased advice and solutions and help doctors achieve their personal and professional financial goals.

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Otsuka Canada Pharmaceutical Inc. #14

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Otsuka Canada Pharmaceutical Inc. (OCPI) is an innovative, fast-growing health care company that commercializes Otsuka medicines in Canada, with a focus on neuroscience, nephrology, oncology and cardiovascular health. OCPI is dedicated to improving patients' health and the quality of human life. OCPI was established in 2010, with headquarters in Saint-Laurent, Québec.

The Otsuka and Lundbeck Global Alliance #15

Otsuka and Lundbeck established a global alliance in November 2011 to bring to bear their considerable experience and resources in the CNS area to introduce next-generation treatments for conditions such as schizophrenia, depression, and Alzheimer's disease.

Otsuka Canada Pharmaceutical Inc. (OCPI) is an innovative, fast-growing health care company that commercializes Otsuka medicines in Canada, with a focus on commitment to neuroscience, cardiovascular, and oncology. OCPI is dedicated to improving patients' health and the quality of human life. OCPI is part of the Otsuka Group, and was established in 2010, with headquarters in Saint-Laurent, Quebec.

A division of Denmark-based H. Lundbeck A/S, Lundbeck Canada Inc. has been a trusted source of innovative new treatments for Canadians since 1995 with headquarters in Montreal.

Originally focused on providing products for the treatment of diseases such as depression, anxiety, Alzheimer's disease and schizophrenia, Lundbeck Canada now offers new cancer therapies for the treatment of chronic lymphocytic leukemia and non-Hodgkin lymphoma. A patient-focused partner in Canadian health care, Lundbeck Canada's mission is to improve the quality of life for people living with brain diseases and cancer.

Pfizer Canada Inc. #4

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Pfizer Canada is a health care company that's dedicated to helping Canadians live healthier lives. Our belief: it takes more than medication to be truly health. Visit www.morethanmedication.ca for more information.

Physician and Family Support Program #9

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The Physician and Family Support Program (PFSP/AMA) encourages well-being and works to help improve the physical, emotional, spiritual, financial and social health of physicians, residents, medical students and their families. The core service of PFSP remains the confidential toll free line which provides a physician to physician call and professional assessment and access to a broad range of services for personal and family problems. There are many other program components that work to support the core service and promote well-being of the physician community, including education and health promotion.

Physician Learning Program #2

The Physician Learning Program is a quality improvement service collaboration between the Universities of Alberta and Calgary and the Alberta Medical Association, which aims to facilitate and create opportunities for physicians to understand individualized and group practice patterns.

University of Calgary - Psychopharmacology Research Unit (PRU) #1

The Psychopharmacology Research Unit (PRU) at the Mathison Centre for Mental Health Research & Education, University of Calgary, collaborates with physicians and health care professionals to provide patients options and additions to their current treatment program through clinical trials.

The PRU is pleased to be part of the Forum (formerly known as Envivo) Pharmaceuticals clinical trial, a randomized, double-blind, placebo-controlled, parallel, 26 week phase 3 study of two doses of an Alpha-7 Nicotinic Acetylcholine Receptor Agonist (EVP 6124) or placebo as an adjunctive pro-cognitive treatment in schizophrenia subjects on chronic stable atypical anti-psychotic therapy.

Sunovion Pharmaceuticals Canada Inc. #12

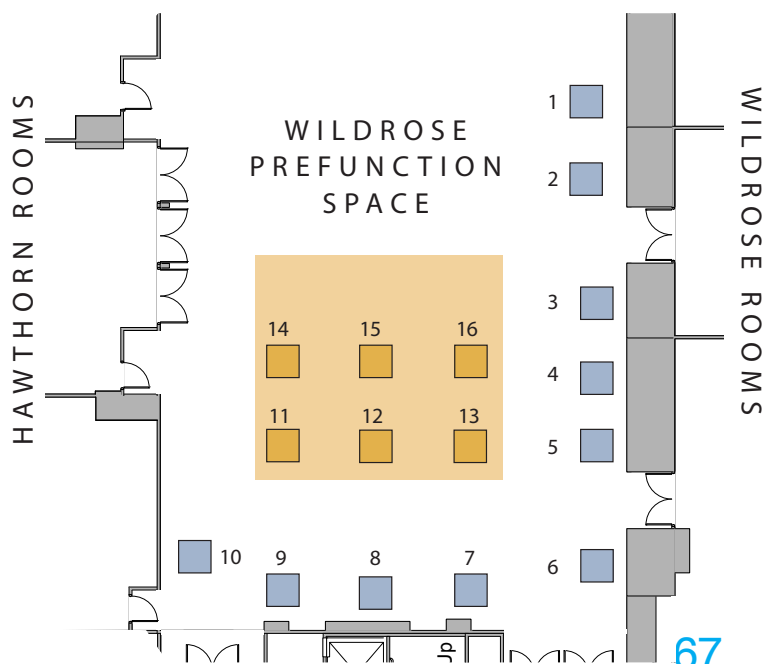
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Sunovion Pharmaceuticals Canada Inc. is focused on the commercialization of prescription products in Canada. Our strategy is to license pharmaceutical products that meet the needs of patients and the Canadian health care system. We are focused in the areas of cardiology, central nervous system and infectious disease.

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