2011 CADDRA Conference
ADHD Research into Practice: A Global View

The Toronto Marriott Downtown Eaton Centre
525 Bay Street, Toronto, Ontario M5G 2L2

October, 14th (evening), 15th and 16th (full days)

This conference precedes the joint AACAP/CACAP conference in Toronto

Target Audience: Pediatricians, psychiatrists, family physicians, psychologists, social workers, other professionals and trainees

Conference Overview: This year’s conference will feature more nationally and internationally renowned speakers than ever before. Our focus will be on current research translated into best practices. The conference will have an international perspective; the opening plenary compares European and North American approaches to ADHD, and many of the speakers will address research findings from a variety of countries. The conference offers a variety of symposia, plenaries, workshops, posters and consultative sessions with ADHD experts.

Learning Objectives:
At the close of the program, participants should:

- Have a better understanding of the impact of emotional dysregulation in ADHD
- Better understand what brain imaging studies have taught us about ADHD
- Be more knowledgeable about the advances in understanding the etiology of ADHD.

Featured Plenary and Symposium Speakers:

Russell A. Barkley Ph.D., Research Professor in the Department of Psychiatry at SUNY Upstate Medical University and Clinical Professor of Psychiatry Medical University of South Carolina;
Judith Rapoport MD, Chief of the Child Psychiatry Branch within the NIMH;
Stephen V. Faraone Ph.D., Director, Medical Genetics Research Professor of Psychiatry and of Neuroscience & Physiology, Director, Child and Adolescent Psychiatry Research, SUNY Upstate Medical University, New York, USA;
David Coghill MB ChB MD FRCPsych, Senior Lecturer in Child and Adolescent Psychiatry, University of Dundee, UK;
John Livesley MD Ph.D., Professor Emeritus at the University of British Columbia, former Professor and head of the Department of Psychiatry;
Alexandra Philipsen MD, Department of Psychiatry and Psychotherapy, University Medical Centre, Freiburg, Germany;
Lily Hechtman MD, FRCPC, Professor, Psychiatry & Paediatrics, McGill University, Montreal, QC;
Umesh Jain MD, FRCPC, DABPN, PhD, MEd, Associate Professor, Psychiatry, University of Toronto, Toronto, ON

Workshop and Consultation Speakers:

Kieran O’Malley MD, Child and Adolescent Psychiatrist, Charlemont Clinic, Our Lady’s Children’s Hospital, Dublin, Ireland.
Anthony L. Rostain MD, Associate Professor of Psychiatry and Pediatrics, School of Medicine & Director, Adult Development Disorders Unit, University of Pennsylvania & co-director, The Children’s Hospital of Philadelphia’s Pediatric Neuropsychiatry Program, Philadelphia, Pennsylvania.
Robert Milin MD, Director of the Adolescent Day Treatment Unit, Youth Psychiatry Program, Royal Ottawa Mental Health Centre, Consultant Psychiatrist and Director of Research for the David Smith Centre for Youth Drug and Alcohol Treatment.
Accreditation:

The University of British Columbia Division of Continuing Professional Development (UBC CPD) is fully accredited by the Committee on Accreditation of Continuing Medical Education (CACME) to provide study credits for continuing medical education for physicians. As well, the Accreditation Council for Continuing Medical Education of the United States (ACCME) maintains a reciprocity relationship with CACME which the American Medical Association (AMA) recognizes for the purpose of allowing Canadian medical schools the ability to certify activities for AMA PRA Category 1 credits and to award such credits to eligible physicians.

This program has been reviewed and approved by the UBC Division of Continuing Professional Development.

UBC CPD designates this educational program as meeting the accreditation criteria of the College of Family Physicians of Canada for up to 14.5 MAINPRO M1 credits.

This program is an Accredited Group Learning Activity eligible for up to 14.5 Section 1 credits as defined by the Maintenance of Certification program of the Royal College of Physicians and Surgeons of Canada.

This program also meets the accreditation criteria for a maximum of 14.5 Category 1 credits toward the American Medical Association Physician’s Recognition Award.

The Canadian Psychological Association has approved this conference up to a maximum of 14.5 continuing education credits. Participants must sign in at the commencement of the event, fill out the CE Credit Authorization form at the completion of the conference and have it signed by Heidi Bernhardt. Participants must attend the entire conference to obtain full credits. Following the conference, CPA members should mail the completed form to CPA head office.

Program Committee:

Dr Umesh Jain (Chair), Dr Doron Almagor, Ms Heidi Bernhardt R.N., Dr Lily Hechtman, Dr Geraldine Farrelly, Dr Martin Gignac, Dr Joan Flood, Dr Laurence Jerome, Dr Diane McIntosh, Dr Simon-Pierre Proulx, Dr Declan Quinn, Dr Dan Ross, Dr Joseph Sadek, Dr Derryck Smith, Dr Margaret Weiss, Dr Annick Vincent

Poster Sessions:

Poster abstracts must be submitted by August 31st, 2011 for the 2nd Annual Atilla Turgay Memorial Poster Prize. Notification of approval will be made by September 15th. Travel and registration confirmations are due by September 30th. Awards will be announced on the last day of the conference. Further information is available at www.caddra.ca or call 416-637-8583 for details and the application form.

Accommodation: Reservations can be made directly through the hotel at 416-597-9200 or 1-800-905-0667. Website: www.marriott.com/hotels/travel/yyzec-toronto-marriott-downtown-eaton-centre-hotel Other options can be found through www.hotels.com (search for hotels near Toronto Eaton Centre, Toronto, Canada).
Conference Fees:

<table>
<thead>
<tr>
<th></th>
<th>Physicians</th>
<th>Psychologists</th>
<th>Pediatricians</th>
<th>Psychiatrists</th>
<th>Medical professionals</th>
<th>Residents</th>
<th>Students</th>
<th>Allied Health</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Full Conference Rate</strong></td>
<td>CAD$479.00 + 62.27 HST = 541.27</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>CAD$349.00 + 45.37 HST = 394.37</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>One Day Only Rate</strong></td>
<td>CAD $309.00 = 40.17 HST = 349.17</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>CAD $199.00 + 25.87 HST = 224.87</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

CADDRA members receive a 10% discount from these fees

Registration Information:

We strongly encourage you to register online at www.caddra.ca under the Register Online button. If you are unable to do so, please print the downloadable registration form found under the Registration Form button. For questions, call 416-637-8583 or email penny.scott@caddra.ca

Refund Policy:
Should you need to cancel your registration, you must do so by e-mail to penny.scott@caddra.ca before September 23, 2011. Your tax receipt must be destroyed. Your registration fee, less a $50.00 handling charge, will be refunded. After September 23, 2011 no refunds will be granted for withdrawal, however the registrant may secure a replacement to fill their spot.

Conference Format:
Topics will be presented in four different formats. Plenary sessions are intended for the entire audience and geared to all disciplines. There will be a variety of workshops and symposia and consultative sessions occurring at the same time which will allow participants to choose those that interest them the most. Many of the workshops will be repeated to offer more flexibility when choosing which presentation you wish to attend. Please look at the Conference Outline: Titles and Abstracts (below) for exact titles and more detailed information on the presentations.
<table>
<thead>
<tr>
<th>Date</th>
<th>Time</th>
<th>Presentation</th>
<th>Speaker(s)</th>
<th>Format</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oct 14th</td>
<td>18:00 – 19:15</td>
<td>Crossing the Divide: Managing ADHD on Either Side of the Atlantic</td>
<td>Coghill</td>
<td>Plenary</td>
</tr>
<tr>
<td></td>
<td>19:15 - 20:30</td>
<td>Poster Presentations – Food &amp; Beverages Provided</td>
<td>Posters</td>
<td></td>
</tr>
<tr>
<td>Oct 15th</td>
<td>07:30 - 09:15</td>
<td>Buffet Breakfast</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>08:00 - 09:15</td>
<td>Advances in Understanding the Etiology of ADHD</td>
<td>Faroone</td>
<td>Plenaries</td>
</tr>
<tr>
<td></td>
<td>09:15 - 10:30</td>
<td>Brain Imaging Studies of ADHD- What Have They Taught Us?</td>
<td>Rapoport</td>
<td></td>
</tr>
<tr>
<td></td>
<td>10:30 - 11:00</td>
<td>Break</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>11:00 - 12:15</td>
<td>Misuse and Abuse of Stimulant Medications Among College Students</td>
<td>Rostain</td>
<td></td>
</tr>
<tr>
<td></td>
<td>12:30 - 13:30</td>
<td>Lunch</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>13:45 - 15:15</td>
<td>ADHD Treatment – The Impact of Comorbidity in Children</td>
<td>Barkley</td>
<td>Workshops</td>
</tr>
<tr>
<td></td>
<td>15:15 - 15:30</td>
<td>Break</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>15:30 - 17:00</td>
<td>The Importance of Emotion in Understanding and Managing ADHD</td>
<td>Barkley</td>
<td>Plenary</td>
</tr>
<tr>
<td></td>
<td>17:00 - 17:45</td>
<td>AGM</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Oct 16th</td>
<td>07:00 - 09:15</td>
<td>Buffet Breakfast</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>07:30 - 08:45</td>
<td>Psychoeducation of the Caregiver and the Patient</td>
<td>Weiss</td>
<td>Breakfast Consultation</td>
</tr>
<tr>
<td></td>
<td></td>
<td>ADHD and Driving</td>
<td>Jerome</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Differential Diagnosis of Complex Adult Patients with ADHD</td>
<td>Hechtman</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Treatment of Adults with ADHD and Comorbid Disorders</td>
<td>Sadek</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Treating Girls and Women with ADHD</td>
<td>Farrelly</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Psychodynamic Approaches to Adult ADHD</td>
<td>Almagor</td>
<td></td>
</tr>
<tr>
<td></td>
<td>09:00 - 10:15</td>
<td>Atypical Forms of ADHD in Adults</td>
<td>Faroone</td>
<td></td>
</tr>
<tr>
<td></td>
<td>10:15 - 10:45</td>
<td>Break</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>10:45 - 12:15</td>
<td>Adult CBT Evidence-Based Research</td>
<td>Hechtman /Philipsen</td>
<td>Symposium</td>
</tr>
<tr>
<td></td>
<td></td>
<td>When ADHD and Substance Use Disorders (SUD) Collide in Youth</td>
<td>Milin</td>
<td>Workshops</td>
</tr>
<tr>
<td></td>
<td></td>
<td>ADHD and FASD. From animal research to clinical experience</td>
<td>O’Malley</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Guidelines for Treating Personality Disorder</td>
<td>Livesley</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Binge Eating, Obesity and ADHD – an Evolving Spectrum Disorder</td>
<td>Levy</td>
<td>Workshops</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Practical Management of Medication Side Effects</td>
<td>Coghill</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>ADHD and FASD. From animal research to clinical experience</td>
<td>O’Malley</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Use of the CADDRA Toolkit in Clinical Practice</td>
<td>Weiss</td>
<td></td>
</tr>
<tr>
<td></td>
<td>12:30 - 13:30</td>
<td>Lunch</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>13:45 - 15:00</td>
<td>(choice of)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>15:00 - 15:15</td>
<td>Break</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>15:15 - 16:30</td>
<td>Future Directions in ADHD</td>
<td>Barkley</td>
<td>Plenary</td>
</tr>
</tbody>
</table>
Plenary Session: Friday, October 14

Crossing the Divide: Managing ADHD on Either Side of the Atlantic
David Coghill MB ChB MD FRCPsych

There is now considerable evidence to support the notion that, when measured carefully, ADHD presents very similarly the world over. This, of course, comes as no surprise to those of us who see ADHD as a neurobiological condition that is, to a large degree, determined by genetic factors. Notwithstanding this, there have historically been significant differences in the acceptance of ADHD by different cultures and by clinicians within different countries. This talk will focus on the similarities and differences in recognition, assessment, diagnosis and management of ADHD in Europe and North America and relate these differences to historical and cultural differences, differences in the ways that healthcare is organised and distributed, differences in the availability of treatments and in the interpretation of the evidence. It will also allow discussion about whether our tendency to focus on differences and the competitive nature of clinicians tends to minimise the many similarities between these two geographical regions.

Learning Objectives

1. Develop an understanding of the various approaches to the assessment and treatment of ADHD within the various European countries
2. Self-reflect on whether it may be appropriate to incorporate any of the European ideas into your own practice
3. Consider whether the treatment options offered by your own service reflect the requirements of your clinical population.

Plenary Sessions: Saturday, October 15

Advances in Understanding the Etiology of ADHD
Stephen V. Faraone Ph.D.

The goal of this talk is to provide a broad overview of what is known about the etiology of ADHD and suggest new directions for ADHD research. The data to be presented were derived from an international review of scientific literature about the genetic and environmental causes of ADHD. We included cohort or case-control studies, using DSM-III/ICD-9 criteria or later, where temporal sequence of cause and effect is clear. The Bradford-Hill criteria were used to assess causality. We found that many studies support the conclusion that ADHD is a disorder of the brain and that the susceptibility to ADHD is influenced by both genes and environmental risk factors. No single risk factor is necessary and sufficient to cause ADHD in the large majority of cases. In addition to several risk genes, premature birth, low birth weight and maternal smoking during pregnancy were implicated as risk factors for ADHD. Progress in understanding the etiology of ADHD will require very large samples and collaborative multidisciplinary projects. Such work should: a) take the potential for false positive findings seriously, b) search for novel methods of diagnosis that rely on biological, rather than clinical features and c) focus on mechanistic rather than descriptive goals.

Learning objectives

Members of the audience will learn:

1. The methodology used to determine the strength of evidence for causal risk factors
2. Genetic variants that increase the risk for ADHD
3. Environmental exposures that increase the risk for ADHD.

Brain Imaging Studies of ADHD – What Have They Taught Us?
Judith Rapoport MD

There have now been several decades of brain imaging studies of ADHD. Initial studies have established a pattern of slightly smaller brain volume, decreased regional volumes and, with new measures, a variety of cerebellar and cortical volumes. Prospective studies have indicated that there is a delay in frontal lobe development, particularly for a subgroup of children, with good outcome. There may be alternate developmental patterns depending on long-term clinical status.

Studies of stimulant drug treatment in children suggest that stimulants may actually normalize development for some brain measures. There are several psychological processes that may be abnormal in ADHD, including Executive Function, Temporal Information Processing and Reward Processing. Newer studies of these and of overall brain networks will also be presented and reviewed.

Learning Objectives

At the completion of the presentation, members of the audience will:

1. Understand the best replicated anatomical and functional brain abnormalities in ADHD
2. Know the effects of stimulant medication on brain development
3. Understand the major neuropsychological theories of ADHD and their support from brain imaging studies.
The Importance of Emotion in Understanding and Managing ADHD
Russell A. Barkley Ph.D.

ADHD is currently understood to be a disorder of inattention, impulsivity, and usually hyperactivity that arises in childhood or early adolescence and is highly persistent over time in most cases. However, since the first medical papers have been published on ADHD starting in 1798, emotion has always been included in the conceptualization of the disorder up through the 1970s. But beginning with DSM-II and progressing to the present, emotional dysregulation has been excluded from the clinical conceptualization of the disorder and the diagnostic criteria and relegated to an associated problem or the result of comorbid disorders. This presentation reviews the evidence from the history, neuropsychology, neuro-anatomy, and observational research that shows that emotional impulsiveness and deficient emotional self-regulation are an integral part of ADHD. Returning emotion to its rightful place as a core feature of the disorder also serves to better explain the development of comorbid disorders, such as oppositional defiant disorder, and well as various life course impairments. Dr. Barkley will discuss how to determine which aspects of emotional adjustment problems in ADHD cases are the result of the disorder and which are likely to be the consequence of comorbidity or other life course circumstances. He will also address the implications of including emotion in ADHD for its management.

Learning Objectives
1. To better understand the history of ADHD and the central place of emotion in the conceptualization of the disorder
2. To better appreciate the current neuropsychological theories of ADHD and the key role of emotional self-regulation problems in understanding the nature of ADHD
3. To learn about the neuro-anatomy of ADHD and why those brain regions implicated in the disorder would be associated with poor emotional self-regulation
4. To gain a greater appreciation for why certain comorbid disorders such as ODD are better explained by the role of emotion in ADHD than by the current DSM view of ADHD
5. To better appreciate how dysregulated emotional control in ADHD predicts the development of various life course impairments
6. To gain greater knowledge of the role of poor emotion regulation in the assessment and management of ADHD

Plenary Sessions: Sunday, October 16

Atypical Forms of ADHD in Adults
Steven V. Faraone Ph.D.

This talk addresses three presentations of ADHD that can create uncertainties in diagnosis. Adults who appear to have a chronic history of childhood onset ADHD, but do not meet DSM-IV criteria, can be diagnosed as ADHD Not Otherwise Specified (NOS). Because little is known about the validity of ADHD NOS, clinicians may be confused as to how to proceed with such cases. We will present data addressing two types of ADHD NOS. Patients with late onset ADHD meet full criteria for ADHD except the age at onset criteria. Patients with sub-threshold ADHD have impairing symptoms of the disorder but have never met full symptom criteria for the disorder. We also provide data about the validity of diagnosing ADHD when it occurs in the presence of very low intelligence or very high intelligence. Mentally retarded patients with ADHD symptoms pose a dilemma because it is not clear if their symptoms are secondary to mental retardation or are due to “true” ADHD. Highly intelligent patients with ADHD pose another diagnostic issue. Such patients are typically functioning above average at school and in occupations. This relatively high level of functioning leads some clinicians to question the diagnosis of ADHD.

We address these issues by reviewing relevant literature and by presenting data from a family-genetic study of adult ADHD that recruited 247 ADHD adults and 123 non-ADHD adults through advertisements, along with all available first degree relatives. Of the ADHD patients, 127 met full DSM-IV criteria (Full ADHD) and 120 met partial criteria (ADHD NOS). These data suggest that one can validly diagnose ADHD in cases of late onset, low intelligence or high intelligence. In contrast, the validity of diagnosing sub-threshold ADHD is less clear.

Learning objectives
Members of the audience will learn:
1. How to identify cases of ADHD-NOS due to late age at onset or sub-threshold symptoms
2. The strength of evidence supporting the validity of late onset and sub-threshold ADHD
3. The strength of evidence supporting the validity of diagnosing ADHD among patients with either very low or very high intelligence.
Future Directions in ADHD  
Russell A. Barkley Ph.D.

This presentation will provide current information on the nature of ADHD and its conceptualization as a disorder of executive functioning and self-regulation. Implications of this reconceptualization for understanding and management will be discussed. Problems in the current diagnostic criteria for ADHD will also be highlighted along with recommendations for addressing these inadequacies. Dr. Barkley will conclude with an overview of the most effective treatments for ADHD as well as those currently deemed experimental and potentially promising.

Learning Objectives
1. Knowledge of the primary characteristics of ADHD and reconceptualizing it as a disorder of executive functioning and self-regulation
2. The issues involved in the diagnosis and subtyping of ADHD and adjustments required to the DSM criteria for special subpopulations
3. An overview of proven and unproven remedies for ADHD.

Symposium: Saturday, October 15

Personality Disorder and Adult ADHD [Livesley/Philipsen/Jain]

The Interface Between Personality Disorder and Adult ADHD  
John Livesley MD Ph.D

The evidence suggests that there is extensive co-occurrence of adult ADHD and personality disorder. Adult ADHD shares clinical features such as emotional lability and aspects of impulsivity with some Cluster B diagnoses such as borderline personality disorder. However, the interrelationships seem to go beyond shared features because patterns of co-occurrence occur with personality disorders from other clusters. This raises interesting questions about the nature of these relationships and the etiological mechanisms involved. This paper will examine different models for explaining the relationship between the two conditions and consider why childhood ADHD is a risk factor for later personality disorder. Inter-relationships between ADHD and personality disorder will also be discussed in the context of current developments in the diagnostic classification of personality disorder.

Learning Objectives
1. To provide an overview of evidence on the relationship between personality disorder and adult ADHD
2. To discuss possible mechanisms that account for the relationship between personality disorder and ADHD
3. To discuss the relationships in the context of current developments to revise the diagnostic classification of personality disorder.

ADHD as a risk factor for Borderline Personality Disorder  
Alexandra Philipsen MD

Introduction: Attention Deficit Hyperactivity Disorder (ADHD) in adults and Borderline Personality Disorder (BPD) share some similar clinical features (e.g. impulsivity, emotional dysregulation). Moreover, ADHD has been reported to be highly associated with the diagnosis of BPD.

Aims: To assess 1) personality disorders (PDs) in adult ADHD patients as well as 2) childhood and adult ADHD in a sample of Borderline PD patients.

Method: 1) 60 adult ADHD patients were assessed with the International PD Examination and severity of childhood ADHD with the Wender-Utah-Rating Scale as well as 2) 118 female BPD patients concerning childhood and adult ADHD and co-occurring psychiatric disorders and traumatic childhood experiences.

Results: 1) In adult ADHD Cluster C PDs were most common (36.6%) followed by Cluster B (23.3%). Avoidant (21.7%) and BPD (18.3%) were the most frequent PDs. ADHD patients with PD suffered from significantly more severe childhood ADHD compared to those without co-occurring PD. 2) In female BPD patients, childhood (41.5%) and adult (16.1%) ADHD prevalence was high. Childhood ADHD was associated with emotional abuse in childhood and greater severity of adult borderline symptoms. Adult ADHD was associated with greater risk for co-occurring Axis I and II disorders.

Conclusions: Severe childhood ADHD is a serious risk factor for PDs in adulthood and patients with severe BPD frequently show a history of childhood ADHD. Further studies ought to differentiate potential causal relationship between ADHD and BPD.
**Learning Objectives**

Attendees should:
1. Be able to describe overlapping clinical features in adult ADHD compared to BPD
2. Know the prevalence of ADHD in personality disorders
3. Be able to recognize the patient at risk.

**Personality Disorders and Attention Deficit Hyperactivity Disorder (ADHD)**

Umesh Jain MD, FRCPC, DABPN, PhD, MEd

**Introduction:** There is a burgeoning literature that supports a concurrent personality disorder concomitant with adult ADHD. This likely adds strength both to the genetic heritability of the condition and to the severity of the impairment when personality dimensions are altered. Currently, much of the literature is looking at estimating the size of the problem, and some literature is showing co-segregation according to Subtypes. We already know that Conduct Disorder (CD) is a prerequisite for the diagnosis of Antisocial Personality Disorder but we don’t know what Oppositional Defiant Disorder (ODD) may turn into.

**Hypothesis:** ODD in childhood is a preamble to later onset Borderline Personality Disorder (BPD) in adulthood.

**Method:** As part of the author’s PhD thesis, 125 adults with ADHD were given the Temperament and Character Inventory but 43 patients were selected who were both diagnosed in childhood with ADHD and who met criteria for ODD. The patients were matched for gender and age to normal controls.

**Results:** When Cluster B patients were identified (n = 21), and they had ODD as children but no CD, they had a 73% likelihood of being BPD compared to normal controls (p < .001).

**Conclusions:** We have to consider that ODD may be the emergence of BPD in adulthood.

**Learning Objectives**

1. To review the literature on co-segregation of Clusters of Personalities to Subtypes
2. To review the psychological construction of ODD and the overlap to BPD
3. To look at treatment implications for clinicians who treat ODD

**Symposium: Sunday, October 16**

**Adult CBT Evidence-Based Research [Hechtman/Philipsen]**

**Treatment of Adults with ADHD: Cognitive Behavioral Therapy (CBT) only vs. Medication and CBT**

Lily Hechtman MD, FRCP

**Objectives:** To evaluate the relative efficacy of CBT only versus medication and CBT combined for adults with ADHD.

**Methods:** Adults who met DSM IV criteria for ADHD via Connors Adult ADHD Diagnostic Interview (CAARSD) and who had no current comorbidities that required treatment were randomly assigned to receive either a 12-week group CBT program or medication with CBT combined. The CBT program, with 6-10 subjects per group, addressed organizational and time management skills, anger management and relationships, as well as self-esteem and cognitive restructuring issues. Individual coaching calls twice a week were also part of this program.

**Outcome evaluations** included ADHD symptoms and the areas outlined above which were targeted in the CBT program.

**Results:** Generally most subjects completed the 12-week CBT program and all groups benefited from the interventions. However, the combined group seemed to benefit most as they were able to make the most use of the CBT program and generalized it best.

**Conclusions:** Adults with ADHD may require both medication and CBT for optimal outcome.
**Learning Objectives**
1. After the presentation, participants will be aware of themes covered in a Cognitive Behavioral approach for Adults with ADHD.
2. After the presentation, participants will be aware of what improvements are possible for adults after 12 weeks of Cognitive Behavioral treatment.
3. After the presentation, participants will be aware of the relative efficacy of stimulant medication alone versus combined with Medication and Cognitive Behavioral Treatment for Adults with ADHD.

**Dialectical Behavioural Therapy-based Treatment in Adult ADHD**
**Alexandra Philipsen MD**

Adult ADHD is a serious risk factor for co-occurring psychiatric disorders and negative psychosocial consequences. Given this background, instead of - or in addition to - psychopharmacological treatment, there is a need for effective psychotherapeutic treatment options for adults with ADHD. Due to overlapping clinical features in adult ADHD and borderline personality disorder (BPD) (e.g. emotion dysregulation, impulse control, low self-esteem, disturbed interpersonal relationships, Philipsen et al. 2008, 2009), our treatment is mainly based on the principles of dialectical behavioural treatment (DBT, Linehan, 1993). Cognitive behavioural treatment strategies are mainly integrated to modify maladaptive thoughts which interfere with the therapy (homework, acquisition of new skills). The structured program is applied in weekly session to adult ADHD outpatients in a group setting. The several topics are presented to the patients in a treatment workbook (Hesslinger et al., 2004).

As shown in our pilot study and multicentre feasibility study (Hesslinger et al. 2002, Philipsen et al. 2007), the DBT-based program with 13 weekly sessions resulted in good outcomes. ADHD severity, depression and personal health status were significantly improved. Patients regarded the program topics “behavioural analyses”, “mindfulness” and “emotion regulation” as the most helpful. As in our initial pilot study, patients in the multicentre study rated the group setting as highly effective. However, so far, randomized placebo-controlled studies comparing the effects of medical management, specific psychotherapy, and the combination of both are still lacking. Therefore, the University of Freiburg, Germany, has initiated a multicentre trial at eight university sites which is funded by the German Federal Ministry of Research and Education. Preliminary data from this study will be presented.

**Learning Objectives**
Attendees will:
1. Be able to describe the structure and topics of the DBT-based treatment program.
2. Know the most relevant therapeutic strategies for adult ADHD based on DBT.
3. Know how to implement a DBT-based treatment program for adult ADHD.

**Workshops: Saturday/Sunday, October 15-16**

**Misuse and Abuse of Stimulant Medications Among College Students**
**Anthony L. Rostain MD**

There has been considerable media focus on the issue of prescription stimulant misuse and abuse among college and university students, which is becoming a growing public health concern. This presentation will review the history of misuse and abuse of stimulants in this population. It will describe the prevalence, signs and symptoms of stimulant misuse and abuse among these students.

This talk will review studies linking nonprescription stimulant usage to student profiles, including risk taking, alcohol and other drug use, health status and academic performance. It will also discuss strategies to limit non-medical use of stimulants on college and university campuses.

**Learning Objectives**
1. Obtain an overview of the history and prevalence of stimulant misuse and abuse among college and university students.
2. Identify the signs and symptoms of abuse in this population.
3. Consider the links between nonprescription stimulant use and other psychiatric conditions.
4. Consider strategies to limit non-medical use of stimulants on college and university campuses.
Guidelines for Treating Personality Disorder
John Livesley MD Ph.D.

This workshop will discuss the implications of recent outcome studies on treating personality disorder. The results suggest that personality disorder can be treated effectively but that outcome does not differ across therapies. Moreover, specialized therapies designed specifically to treat personality disorder do not yield significantly better outcomes than good clinical care. These findings suggest the merit of using an integrated treatment model that emphasizes the use of generic treatment methods common to all effective treatments supplemented as needed with an eclectic array of more specific interventions drawn from different forms of therapy. The workshop will discuss practical ways to implement integrated treatment in terms of a set of guidelines that clinicians can use to manage personality disorder when treating other co-occurring conditions.

Learning Objectives
1. To identify general principles for treating personality disorder based on recent outcome studies
2. To describe an integrated approach to treating personality disorder
3. To discuss practical guidelines for treating personality disorder co-occurring with adult ADHD.

Practical Management of Medication Side Effects
David Coghill MB ChB MD FRCPsych

The safety of ADHD medications is not fully known. A lack of contemporary, standard information about medications first licensed several decades ago in addition to signals of possible harm arising from more recently-developed medications have caused concern. These relate to both relatively minor adverse effects and extremely serious issues such as sudden cardiac death and suicidality. A guidelines group of the European Network for Hyperkinetic Disorders (EUNETHYDIS) has therefore reviewed the literature, recruited renowned clinical subspecialists, and consulted as a group to examine these concerns. Some of the effects examined appeared to be minimal in impact or difficult to distinguish from risk to untreated populations. However, several areas require further study to allow a more precise understanding of risks. This workshop will look at the practical recommendations for managing these adverse effects focusing particularly on the assessment and management of cardiac risk.

Learning Objectives
1. Understand the current evidence relating to the common and less common adverse effects associated with ADHD medications, and the gaps in our understanding
2. Compare your own current practice in the management of cardiac risk with the recommendations of the EUNETHYDIS group
3. Consider which adverse effects should be managed by the generalist and when to refer to a specialist.

When Attention Deficit Hyperactivity Disorder (ADHD) and Substance Use Disorders (SUD) Collide in Youth
Robert Milin MD, FRCPC

ADHD is a common comorbid disorder in adolescents and young adults with SUD, with rates ranging from 17 to 38% in both clinical and community samples. The significance of comorbid ADHD appears to lie with its association with CD in adolescents. ADHD is a risk factor for SUD when mediated by disruptive behavioural disorders in adolescents. Furthermore, the severity of ADHD may impact the risk for development of SUD in adolescents. The relationship between ADHD, CD and SUD is complex and may represent a worse prognosis for the persistence of antisocial behaviour and substance abuse.

Adolescents with ADHD have shown an earlier age of onset of SUD, and a more rapid progression of SUD from abuse to dependence. More serious substance abuse is found in adolescents with SUD and comorbid ADHD than in those without ADHD. Persistence of ADHD into young adulthood has been shown to be an independent risk factor for the development of SUD.

There is sound evidence that treatment of children and adolescents with stimulants does not to increase the risk of developing SUD in adolescence or young adulthood. There is also evidence to suggest that stimulant treatment of children with ADHD significantly decreases the risk of developing SUD in adolescence, but this protective effect of stimulant treatment wanes as they enter young adulthood.

This workshop, apart from looking at the relationship of ADHD and SUD, will examine the assessment and treatment of ADHD in adolescence/young adulthood specific to SUD, providing evidence-influenced practical guidelines for the clinician.
Learning Objectives
1. Review comorbid substance abuse in adolescents and young adults with ADHD
2. Outline the challenge addiction presents within the context of ADHD, and ADHD in the context of addiction
3. Provide practical guidelines on the assessment and treatment of ADHD with comorbid substance abuse in adolescents and young adults.

Binge Eating, Obesity and ADHD – An Evolving Spectrum Disorder
Lance Levy MD

This presentation will discuss how a highly heritable neurological adaptation is linked in a causal way to the development of Obesity and Binge Eating. ADHD appears to have been around since ancient times, and has likely evolved as a syndrome with a variable form of expression. In more recent times, evolutionary pressures have changed as the environment has been altered radically in a span of time that is a minute fraction of human history. The increasing prevalence of ADHD syndrome suggests that, globally, CNS adaptive functioning cannot keep pace with certain lifestyle changes in the past century. Physical movement has been severely limited, food is abundant, and stimulus levels - both visual and auditory - are at levels never before encountered, and not accompanied by appropriate somatosensory feedback. As these changes have occurred against this certain background, the prevalence of obesity has increased dramatically. One interesting cause of weight gain is that people stay up well past sunset, and take gym classes at 9 pm. They watch TV for late night news, study, do laundry, play computer games, or surf the net. Weight gain is clearly linked to these behaviours and pastimes and the mechanisms are becoming clear. There are no shortages of causes of weight gain. Diet plans are dismal failures. Interestingly, we have shown that people who seek plans are deeply skeptical of there being any value to them, and are unable to keep to a plan of action. Yet $40 billion is spent annually on weight loss approaches that aren’t working for the majority.

So, the paradox Dr. Fleming and I have tried to solve is why obese individuals repeatedly fail at weight loss despite having a sufficient understanding of how diet and lifestyle choices affect weight. It is fair to say that people succeed at a task where they can, and if they do not, it is generally because they cannot and not because they are lazy or unmotivated. Weight loss is an unusual task compared to many things people strive to do and succeed at, because it is a necessarily lengthy endeavour due to the laws of thermodynamics and one that humankind has had relatively little experience at. Our approach to obesity and binge eating has been to look at factors that adversely affect awareness of internal cues, such as hunger and fullness, time management, energy level during the daytime, mood, impulse control, and working memory. Without that awareness and ability to respond adequately, the long-term application of modest effort is unsustainable and weight loss fails. We have found that favourably altering these factors affects weight loss or binge eating, by empowering individuals previously unable to take control.

Learning objectives
1. To be able to understand the origins of obesity and adequately investigate a patient who is obese as to treatable causes
2. Become aware of circadian rhythm disturbances and their link to the development of obesity, hypertension, and diabetes
3. Understand how management of ADHD affects weight control and binge eating disorder.

Use of the CADDRA Toolkit in Clinical Practice
Margaret Weiss PhD, MD, FRCPC

This is a hands-on interactive workshop in which we will review each part of the CADDRA guidelines, and in particular how to use the ADHD toolkit to facilitate effective and efficient diagnostic assessment and treatment within family medicine and primary paediatrics. We will review how to use the assessment form over a period of interviews so that it is not onerous in primary care settings. Rating scales will be reviewed to help clinicians understand how to pull together their observations, the family history, the developmental history, the teacher report and rating scale scores to support or negate a diagnosis. The various components of treatment will be discussed with suggestions and the relevant sections of the guidelines identified to assure that the clinician is familiar with current pharmacotherapy as well as educational accommodations and parent training.

Learning Objectives:
Following this workshop:
1. Clinicians will be confident in conducting an ADHD assessment and providing first line treatment for all ages
2. The CADDRA guidelines have been recognized as among the most user-friendly guidelines available, and through discussion of the actual materials we hope to address any specific impediments to providing care that clinicians experience in practice
3. Specific questions about diagnosis, differential diagnosis, or management will be addressed.
ADHD Treatment – the Impact of Comorbidity in Children
Russell A Barkley Ph.D.

Over 80% of children and adults with ADHD have at least one other psychiatric disorder and more than 50% have at least two such comorbid disorders. Research now shows that the second disorder that co-exists with ADHD often has a significant clinical impact on both the understanding of the joint presentation of these disorders and the treatment of them. All ADHD is not the same in terms of management. Topics to be covered include: past approaches to ADHD subtyping; using comorbidity to clinically subtype ADHD; prevalence of comorbidity in ADHD; and specific disorders and their treatment implications, such as Oppositional Defiant Disorder, Conduct Disorder, Anxiety Disorders, Depression, Bipolar Disorder, Autistic Spectrum Disorders, Tics and OCD, and Learning Disabilities, among others.

Learning Objectives
1. A review of the most common comorbid disorders that co-exist with ADHD and the reasons they may be associated with ADHD
2. A description of the possible effects these comorbid disorders may have on both understanding the clinical case and especially in selecting treatment options to address both the ADHD and the comorbid disorder
3. Special attention will be given to discussing the impact of comorbid oppositional defiant disorder, conduct disorder, anxiety disorders, mood disorders, tic disorders and OCD, sleep disorders, and learning disabilities
4. For each, the presenter will focus on how they may alter treatment planning.

OCD and ADHD – Research and Treatment
Dr Judith Rapoport MD

ADHD has broad comorbidity, most frequently with other behaviour disorders. However, comorbidity with anxiety disorders and with obsessive-compulsive disorder (OCD) is not rare. Some have suggested that the hoarding subtype is particularly comorbid. The association of ADHD and OCD with Tourette syndrome is well known, this provides a further connection between OCD and ADHD as some early TS cases may not be recognized. While PANDA patients (pediatric OCD associated with streptococcal infection) may be rare, these patients almost inevitably have ADHD.

This workshop will consist of an overview of issues concerning OCD comorbidity with ADHD and encourage sharing of cases (both Dr. Rapoport's and the group's) with respect to treatment, clinical outcome and underlying neurodevelopmental hypotheses.

Learning Objectives
1. Understand the strength and possible mediators of comorbidity between OCD and ADHD
2. Become familiar with treatment implications of comorbid OCD and ADHD
3. Update information on brain imaging of co-morbid OCD and ADHD

“Here We Are, Now Teach Us!” – College Students with ADHD
Anthony L. Rostain MD

College and university students in the 21st Century face unique challenges. This presentation will discuss the multitude of stresses associated with the transition to college (as part of the transition to adulthood). It will review in particular the pressures faced by students with ADHD, including risk and protective factors, as well as outcomes.

This talk will describe a model of the stages of change that helps us to understand the ambivalence experienced by many college students seeking disabilities services. It will also discuss the interface of different systems that can be brought together to help students with ADHD succeed in post-secondary education. A multi-system framework for intervention will be described that includes educating patients and families about resources that are most helpful, environmental restructuring, pharmacotherapy, psychotherapy, other support modes, academic support and accommodations, study skills / learning habits, career counseling and constructing an interface between clinical and educational resources. Other ongoing system issues will also be discussed in the context of case presentations.

Learning Objectives
1. To better understand the stressors facing college and university students today
2. Learn the risk and protective factors involved
3. Consider ways to help students with ADHD in college and university.
ADHD and FASD. From Animal Research to Clinical Experience
Kieran O’Malley MD

The presentation will begin by reviewing the animal, alcohol in pregnancy, teratology which clearly shows the link between 'hyperactive, disorganized and impulsive behaviours' and prenatal exposure to alcohol. These studies will also demonstrate the 'transgenerational ADHD' effect of prenatal alcohol exposure on subsequent parenting of young progeny. Following the animal research, the presentation will produce data from longitudinal and cross-sectional studies supporting the ADHD clinical presentation of patients with a history of alcohol exposure in pregnancy. The challenges of a transgenerational approach to ADHD and Alcohol Dependence in FASD will be discussed. Many case examples will be utilised. The early onset of Regulatory Disorders will be shown to be a possible prodromal condition predating ADHD in patients with prenatal alcohol exposure. The appreciation of alcohol-induced sensory integration problems and its connection to later ADHD will be explored. Management approaches in FASD patients with ADHD are consistent with MDA multimodal concepts, but particular attention will be paid to sensory integration therapy in children under five years of age, and the more appropriate use of medications in later age groups.

**Learning Objectives**
1. To establish the link between ADHD and FASD through animal and human studies
2. To describe the clinical presentation of ADHD in FASD with origins in infant/young child Regulatory Disorder
3. To review psychopharmacological therapy and/or sensory integration therapy in patients with ADHD and FASD through the lifespan.

**Breakfast Consultations: Sunday, October 16**

Psychoeducation of the Caregiver and the Patient
Margaret Weiss PhD, MD, FRCP

A major complaint of families is that they are referred by the school to see their paediatrician or doctor who tells them their child has ADHD and needs to take medication "without talking to the child or explaining what this diagnosis means". The objective of this session is to discuss why education of the caregiver and patient is necessary, and to look at some psychoeducational procedures developed at Vancouver’s Children’s and Women’s Hospital to provide parent support, increase understanding of the disorder, and to promote the “unblaming" of the child by the full spectrum of people involved in care (including teachers, relatives, step parents, and day care workers). Participants are encouraged to ask questions about their difficulties in providing education on ADHD for patients and their caregivers.

**Learning objectives**
1. To provide a framework for clinicians on how to approach families and teachers in explaining ADHD
2. To describe three distinct programs that are cost effective and meet the distinct needs of different families
3. To share and promote the learning materials used in these programs.

ADHD and Driving
Laurence Jerome MB ChB, MSc, FRCPsych, FRCP

This interactive small group session will discuss current CADDRA Guidelines on ADHD and Driving. This includes: key points for physicians to review with adolescents and adults who have ADHD; risk data; protective factors; evaluation of driving risk and clinical documentation; and the role of psychopharmacology as well as non-pharmacological intervention.

**Learning Objectives**
Participants will gain knowledge on:
1. Risk data as a protective factor for ADHD and Driving
2. Evaluation of driving risk and clinical documentation
3. Current data regarding medication management and psychosocial interventions.

Differential Diagnosis of Complex Adult Patients with ADHD
Lily Hechtman MD, FRCP

This session is meant to be interactive and will explore issues of differential diagnosis, e.g. between ADHD and Bipolar Disorder, ADHD and Depression or Anxiety and ADHD and Borderline Personality Disorder and Substance Abuse Disorder.

The area of comorbidity with the above conditions will also be discussed. Participants are encouraged to bring and present their own problematic cases.
Learning Objectives

1. Participants will explore how to differentiate ADHD versus Bipolar Disorder, Depression, Anxiety, Borderline Personality Disorder and Substance Use Disorder.
2. Participants will explore how to determine if ADHD is comorbid with the above disorders.
3. Participants will discuss a variety of situations where differential diagnoses will be required.

Treatment of Adults with ADHD and Comorbid Disorders
Joseph Sadek MD, FRCPC, DABPN, MBA

The topic of ADHD comorbidities is of increasing importance. There are many challenging areas in understanding, diagnosing and managing comorbidities of ADHD. The session will also attempt to answer some questions such as: Why are Conduct disorder and ADHD highly comorbid? Is depression a common comorbidity of ADHD? Would ADHD comorbid with seizure disorder be managed by psychostimulant? This session will discuss available books and resources that are helpful and also discuss some of the differentiating features between ADHD and other common axis i and ii disorders.

Learning Objectives

1. Learn about diagnosis of the different comorbid conditions associated with ADHD
2. Learn the different approaches of managing ADHD comorbidities
3. Understand the possible etiological factors that increase comorbidity in some conditions, e.g. ADHD and Conduct disorder.

Treating Girls and Women with ADHD
Geraldine Farrelly MD, FRCPC, DCH, DObst

This consultative session will address the facts and myths regarding ADHD in girls and women by outlining the differences between females and males with ADHD, including the differences in co-morbidities and why fewer females are diagnosed and diagnosed at a later age. Environmental and hormonal factors will be discussed as well as the unique challenges females experience across their lifespan. Participants are encouraged to bring in cases to be discussed.

Learning Objectives:

1. Compare the similarities and differences in females and males with ADHD and how they may present differently in the practitioner’s office.
2. Outline the hormonal and environmental factors that play a role in ADHD in females.
3. Discuss the unique challenges females diagnosed with ADHD experience across their lifespan

Sponsored Lunch: Saturday, October 15

Cognition and ADHD – New Concepts and Implications for Treatment
Kevin Kjernisted MD, LMCC, FRCPC, Clinical Associate Professor, University of British Columbia, Vancouver, BC
Larry Klassen MD, Research Chair, Eden Mental Health Centre, Winkler, MB

In ADHD, identifying symptoms and making a diagnosis in order to guide treatment has been an admirable pursuit to improve the lives of patients encountered. The resulting improvements in morbidity have been significant, and the evolving focus on response and then optimal symptom control has raised the bar for treatment outcome.

More recently, the optimal outcome involves normalized functionality. This new benchmark requires not only the absence of identified symptoms (hyperactivity, impulsivity and attention deficit), but also restoration of all aspects of executive functioning. A better understanding of what is subsumed under executive functioning, as well as some of the presumed neurobiological underpinnings, may be helpful in improving baseline assessment and treatment of symptoms and behaviors contributing to functional impairment.

Learning Objectives

At the end of this program, participants should be able to:
1. Discuss the meaning of executive functioning and how it is impaired in ADHD
2. Understand possible neurobiologic underpinnings for altered executive functioning involved in patients with ADHD
3. Apply advances in cognitive neuroscience to clinical practice in order to improve patient outcomes