Canadian League Against Epilepsy
2017 Scientific Meeting Program
Celebrating 40 Years
Pinnacle Hotel Harbourfront, Vancouver
October 13–15, 2017
**HISTORY OF THE CLAE**

The history of the Canadian League Against Epilepsy (CLAE) can be traced back to the 1975 Canadian Neurological Congress in London, Ontario, where Dr. Juhn Wada and colleagues discussed the idea of boosting clinical and basic research efforts on epilepsy nationwide and increasing public awareness on the research frontiers of epilepsy through developing a professional Canadian organization.

Those colleagues included Dr. Norman Auckland, Dr. Frederick Andermann, Dr. Warren Blume, Dr. Henry Dunn, Dr. Keith Meloff and Dr. Allan Sherwin. Together, they became the founding members of the CLAE. The inauguration of the CLAE was celebrated by hosting an international symposium in Vancouver, BC, on May 20 and 21, 1977.

We celebrate and offer gratitude to 40 years of outstanding leadership by the following Founders and Past Presidents of the CLAE:

<table>
<thead>
<tr>
<th>Founding Member</th>
<th>Keith Meloff</th>
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<tr>
<td>Past President and Founding Member</td>
<td>Juhn Wada</td>
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<td>Past President and Founding Member</td>
<td>Norman Auckland</td>
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<td>Past President</td>
<td>Joseph Bruni</td>
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<td>Alan Guberman</td>
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<td>Past President</td>
<td>Elout Starrveld</td>
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<td>Past President</td>
<td>Sam Wiebe</td>
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<td>Past President</td>
<td>Lionel Carmant</td>
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<td>Richard Wennberg</td>
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<td>Past President</td>
<td>Sharon Whiting</td>
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<td>Past President</td>
<td>Nizam Ahmed</td>
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<td>Past President</td>
<td>Nathalie Jetté</td>
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The plenary sessions will take place in Harbourfront Ballroom 1. Breakout sessions will be held in Harbourfront Ballroom 1, Harbourfront Ballroom 2 and in Port of Hong Kong/New York. The Harbourfront Ballrooms 1 and 2 are located on the 2nd floor. Port of Hong Kong/New York is located on the 3rd floor.

Exhibits
Meeting participants will have an ideal opportunity to learn about the latest in pharmaceutical, publications, scientific equipment and technology relevant to the field of epilepsy and neurophysiology. The commercial exhibits will take place on Friday, October 13 from 4:00 p.m. to 5:00 p.m., Saturday, October 14 from 7:30 a.m. to 5:00 p.m. and Sunday, October 15 from 7:30 a.m. to 12:30 p.m.

Exhibit Hall

EXHIBITORS
1 Canadian Epilepsy Alliance
2 Eisai
3 Sunovion
4 UCB
5 Zogenix
6 Surgi-One
7 Medreleaf
8 LivaNova
9 GeneDx
10 Spectrum Cannabis
DID YOU REGISTER FOR THE CLAE FUN RUN/WALK YET?

Saturday, October 14, 2017 // 2017 CLAE Fun Run/Walk

This event raises funds for the annual CLAE Trainee awards. Help us to ensure the success of our researchers, maintain our level of excellence and give hope to more than 300,000 Canadians with epilepsy!

Last year the CLAE held the inaugural CLAE Fun Run/Walk to raise funds for CLAE awards and projects. With almost $5,000 raised, the event was a major success and very rewarding for participants. This year we are doubling our goal and challenging you to raise $10,000!

Can we beat last year? Let’s lace up and find out!

Challenge your colleagues to join you on this 5 km run or 3 km walk and take in the stunning Vancouver scenery.

When: Saturday, October 14, 2017 at 6:30 a.m.
Location: Meet in the lobby of the Pinnacle Hotel Harbourfront at 6:15 a.m.
Details: 5 km run or 3 km walk
Entry Fee: $35.00

Please visit the CLAE registration desk onsite to register for the Fun Run/Walk or to donate and support a runner!
WELCOME FROM THE PRESIDENT

Dear friends and colleagues,

It is my absolute pleasure, on behalf of the Canadian League Against Epilepsy (CLAE), to welcome you to the 2017 Scientific Meeting in beautiful Vancouver, where we will celebrate the 40th anniversary of the CLAE.

I would like to take this opportunity to thank Dr. Paolo Federico, our Director of Education, and the Education Committee for helping us develop a program for this meeting that is broad in scope and very translational. There are sessions for everyone! Topics this year include neuropsychology of epilepsy, newer medical treatments, update on infantile spasms, women and epilepsy, brainstem seizures, and more.

A Fun Run/Walk for epilepsy will take place on Saturday, October 14 at 6:30 a.m. so grab your sneakers and join the fun! Last year we raised almost $5,000. Can we beat our best? Let's lace up and find out! This great event is aimed at raising funds for epilepsy research, educational activities, and much more.

I invite all CLAE members to attend the Annual General Meeting on Friday, October 13 at 5:00 p.m. where new members of the CLAE Board will be announced. Shortly after, I will give the Welcome and Presidential Lecture. The evening of October 13 will conclude with the plenary talk by Dr. Andres Kanner of the University of Miami on the topic of “Negative Impact of Psychiatric Comorbidities on the Course and the Pharmacologic and Surgical Treatments of Epilepsy.”

I hope this conference provides you the opportunity to expand your collaborative network so that we can continue to work together to improve the lives of those living with epilepsy in Canada and beyond! Welcome and enjoy your time in Vancouver, a city with plenty of diversity, culture, cuisines, and so much more!

Sincerely,

Jorge Burneo, MD, MSPH, FAAN
President, CLAE

2017 CLAE Board of Directors

Jorge Burneo, President
Dang Nguyen, President-Elect
Nathalie Jetté, Past President
Mary Lou Smith, Secretary
David Steven, Treasurer
Paolo Federico, Director of Education
Kristin Ikeda, Junior Member Representative
Deirdre Floyd, Canadian Epilepsy Alliance Representative
Campbell Teskey, Canadian Epilepsy Research Initiative Representative
Samuel Wiebe, International League Against Epilepsy Representative
Kathy Speechley, Canadian Pediatric Epilepsy Network Representative
Laura Jurasek, Canadian Epilepsy Nursing Group Representative
Dear CLAE members and friends,

Welcome to the 2017 CLAE Scientific Meeting, celebrating the 40th anniversary of the CLAE.

The CLAE Education Committee has organized an excellent program for the meeting. One main theme will include psychiatric, cognitive and psychosocial issues in epilepsy. Other topics will include personalized therapy of epilepsy, utilization of epilepsy surgery, brainstem seizures and SUDEP, pre- and post-surgical neuroimaging in epilepsy, infantile spasms, neurointensive monitoring, stereotactic ablative surgical techniques, women and epilepsy, challenging topics in epilepsy surgery and parietal lobe epilepsy.

Our meeting will also feature two short courses, one focusing on the pharmacology of newer anti-seizure drugs and the other on neuropathology of epilepsy. These courses will be of widespread interest to all CLAE attendees. There will also be platform presentations from the four top-ranked trainee abstracts.

I hope that you will enjoy the meeting.

Sincerely,

Paolo Federico, MD, PhD, FRCPC, CSCN (EEG)
Director of Education, CLAE

CLAE 2017 Education Committee
Paolo Federico, Chair
Peter Carlen
Richard Desbiens
Linda Huh
Laura Jurasek
Neda Ladbon-Bernasconi
Mary Pat McAndrews
Bernd Pohlmann-Eden
Campbell Teskey
Matthew Wheatley
September, 2017

Dear delegates and guests:

It is my pleasure to welcome you to the Canadian League Against Epilepsy (CLAE) Scientific Meeting in Vancouver.

For 40 years CLAE has worked to enable Canadians affected by epilepsy to live a life that is not limited by their condition. During that time we’ve seen research and innovation transform the lives of those with epilepsy. Events like this provide excellent opportunities to share research, enhance inter-disciplinary collaboration, raise funds, and increase public awareness.

Our city is a bustling hub for innovation in bio-technology and medical research. Vancouver’s University of British Columbia is a world class research University with strong ties to Vancouver Coastal Health and Vancouver General Hospital, supporting medical innovation by linking students, doctors and researchers.

While here I invite you to walk along our seawall, dine at our world class restaurants and take in the mountains and parks that have earned our province the title of Beautiful British Columbia.

Thank you for choosing Vancouver as your host city. I wish you a pleasant and productive scientific meeting.

Sincerely,

Hon. Hedy Fry, P.C., M.P.
The CLAE is one of 98 chapters of the International League Against Epilepsy (ILAE). The CLAE is an organization of medical and basic sciences professionals counting more than 175 members including physicians, basic scientists and other researchers, nurses, neuropsychologists, students and other health professionals. Our members are all keen to take advantage of their passion and knowledge in their respective fields to better respond to various basic needs of the epilepsy population, both present and future. We also work in collaboration with several organizations such as the Canadian Epilepsy Alliance (CEA), the American Epilepsy Society and the North American Commission of the ILAE. The Canadian Epilepsy Scientific Meeting is the largest Canadian meeting of those who share the common scientific and clinical interests of epilepsy and clinical neurophysiology.

Mission Statement

Our goal is to develop, through research, innovative therapeutic and preventative strategies to avoid the consequences of epilepsy. We also want to translate these discoveries into applicable therapies for all Canadians. Finally, we want to promote national awareness and educate all Canadians about epilepsy and its consequences in collaboration with the Canadian Epilepsy Alliance.

Policy on Commercial Support and Conflict of Interest

All presenters and planners are required to disclose any conflict of interest during their presentations.

Accreditation

Accredited by UBC CPD

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. This course has been reviewed and approved by the UBC Division of Continuing Professional Development. This course is an Accredited Group Learning Activity eligible for up to 12.5 MOC Section 1 credits as defined by the Maintenance of Certification program of the Royal College of Physicians and Surgeons of Canada. Each physician should claim only those credits he/she actually spent in the activity.
MEETING LEARNING OBJECTIVES

At the end of the meeting, participants should be able to:

- Review cognitive, psychiatric and psychosocial issues important in epilepsy.
- Identify different approaches to challenging cases in epilepsy surgery.
- Discuss the utilization of epilepsy surgery.
- Review basic and clinical pharmacology of the newer anti-seizure drugs.
- Review common neuropathological lesions that cause seizures.
- Review personalized therapy of epilepsy.
- Review potential mechanisms underlying SUDEP.
- Review stereotactic and ablative surgery in epilepsy.
- Review pre- and post-surgical diagnostic imaging in epilepsy.
- Review infantile spasms.
- Review women and epilepsy.
- Review parietal lobe epilepsy.

PROGRAM

Friday, October 13, 2017

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<tr>
<td>4:00 p.m.</td>
<td>Conference Registration and Exhibits</td>
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<td>5:00 p.m.</td>
<td>CLAE Annual General Meeting</td>
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<tr>
<td>6:00 p.m.</td>
<td>Welcome and Presidential Lecture</td>
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<td>Dr. Jorge Burneo, Western University, CLAE President</td>
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<tr>
<td>6:30 p.m.</td>
<td>Canadian Epilepsy Alliance / Alliance canadienne de l’épilepsie</td>
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<td>Successes of the Past and Challenges in the Future</td>
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<td>CEA Board Members</td>
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<td>7:00 p.m.</td>
<td>Negative Impact of Psychiatric Comorbidities on the Course and the</td>
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<td>Pharmacologic and Surgical Treatments of Epilepsy</td>
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<td>Dr. Andres Kanner, University of Miami</td>
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<td>Chair: Dr. Paolo Federico, University of Calgary</td>
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KEYNOTE SPEAKER

LEARNING OBJECTIVES:

- Will be able to recognize the association of a history of psychiatric comorbidities preceding the onset of epilepsy and the risk of developing treatment-resistant epilepsy.
- Will be able to identify patients at risk for the development of iatrogenic psychiatric adverse events associated with pharmacotherapy and epilepsy surgery.
- Will be able to understand the pathogenic mechanisms that may explain the negative impact of psychiatric comorbidities on the course of epilepsy.

8:00 p.m. Wrap-up for the Day
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<tr>
<td>6:30 a.m.</td>
<td><strong>CLAE Fun Run/Walk</strong>&lt;br&gt;Join us for the 2&lt;sup&gt;nd&lt;/sup&gt; CLAE Fun Run/Walk!&lt;br&gt;<em>Meet at 6:15 a.m. in the lobby of the Pinnacle Hotel Harbourfront</em></td>
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<tr>
<td>7:30 a.m.</td>
<td><strong>Registration and Breakfast</strong></td>
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<td>8:25 a.m.</td>
<td><strong>Welcome and Introductions</strong>&lt;br&gt;Dr. Paolo Federico, University of Calgary</td>
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<td>8:30 a.m.</td>
<td><strong>New Questions in the Neuropsychology of Epilepsy</strong>&lt;br&gt;Chair: Dr. Mary Pat McAndrews, University of Toronto</td>
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**PLENARY**

**LEARNING OBJECTIVES:**
- Learn about the cognitive and social factors associated with adaptive function in children with epilepsy.
- Understand the impact of childhood epilepsy surgery on the later development and attainment of psychosocial and vocational milestones.
- Identify abnormalities in cognition and brain structure in relation to obesity and epilepsy.
- Learn about a new hypothesis regarding epileptiform activity in the medial temporal lobe and progression of age-related memory decline to Alzheimer's disease.

**TOPICS AND SPEAKERS:**

**Acting Your Age: How Do Cognition and Social Skills Impact Adaptive Functioning in Pediatric Epilepsy**<br>Dr. Elizabeth Kerr, The Hospital for Sick Children

**All Grown Up: Social Outcomes After Pediatric Epilepsy Surgery**<br>Dr. Mary Lou Smith, University of Toronto

**Food for Thought: Obesity and Epilepsy**<br>Dr. Marilyn Jones-Gotman, McGill University

**A New Link: Medial Temporal Lobe 'Hyper-Excitability' and Alzheimer's Disease**<br>Dr. Mary Pat McAndrews, University of Toronto

| 10:15 a.m. | **Break and Exhibits** |
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**SESSION 1-A**
Harbourfront Ballroom 1

**Personalized Therapy of Epilepsy: Where are we in 2017?**
Chair: Dr. Kathy Speechley, Western University

**LEARNING OBJECTIVES:**
- Review gene discovery in epilepsy and integration in clinical practice.
- Review screening for new therapies using a zebra fish model.
- Review the impact of early diagnosis and treatment on health related quality of life and psychiatric comorbidity.

**TARGET AUDIENCE:** Epileptologists, residents, fellows, nurses, psychologists.

**TOPICS AND SPEAKERS:**
- **Integration of Next Generation Sequencing into Clinical Care**
  Dr. Michelle Demos, University of British Columbia
- **Screening for New Anti-Seizure Therapies Using High Throughput Sequencing in a Zebra Fish Model**
  Dr. Deborah Kurrausch, University of Calgary
- **Targeted Therapies in Epilepsy (Includes Case Presentations)**
  Dr. Mary Connolly, University of British Columbia
- **Determinants of Quality of Life and Psychiatric Comorbidity in Epilepsy in Children**
  Dr. Mary Lou Smith, University of Toronto

**SESSION 1-B**
Harbourfront Ballroom 2

**The Utilization of Epilepsy Surgery: Potential Gaps and Future Directions**
Chair: Dr. Mark Keezer, Université de Montréal

**LEARNING OBJECTIVES:**
- Review the evidence for the underutilization of epilepsy surgery.
- Interpret preliminary results of the 2016 National Epilepsy Surgery Survey, a nationwide audit of epilepsy surgery.
- Review barriers to ready-access to epilepsy surgery and present strategies to improve this access.
- Review the recently launched Ontario Comprehensive Epilepsy Care program.

**TARGET AUDIENCE:** Neurologists, epileptologists, epilepsy surgeons and allied health providers.

**TOPICS AND SPEAKERS:**
- **Patterns of Utilization of Epilepsy Surgery**
  Dr. Mark Keezer, Université de Montréal
- **The National Epilepsy Surgery Survey**
  Dr. Walter Hader, University of Calgary
- **Barriers and Strategies to Improve Access to Epilepsy Surgery**
  Dr. Nathalie Jetté, Icahn School of Medicine at Mount Sinai
- **The Ontario Comprehensive Epilepsy Care Program**
  Dr. Carter Snead, University of Toronto
# PROGRAM

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<tr>
<td>10:45 a.m.</td>
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<tr>
<td><strong>SESSION 1-C</strong></td>
<td><strong>Brainstem Seizures: Implications for Autonomic Dysfunction and SUDEP</strong></td>
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<td>Port of HK/NY</td>
<td>Chair: Dr. Campbell Teskey, University of Calgary</td>
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**LEARNING OBJECTIVES:**
- Review brainstem seizures.
- Review the relationship between brainstem seizures and autonomic dysfunction.
- Review modelling of sudden unexpected death in epilepsy in rodents.
- Review potential interventions and the possibility for their translation to the clinic.

**TARGET AUDIENCE:** Epileptologists, scientists, neurophysiologists, imagers, students.

**TOPICS AND SPEAKERS:**
- **Brainstem Hypoxia Following Forebrain Seizures is Linked to Apnea Followed by Asystole in a Mouse Model of SUDEP**
  Dr. Campbell Teskey, University of Calgary
- **Brainstem Seizures in a Rat Model of Acute Recurrent Hippocampal-Originating Seizures: Apnea, Cardiac Suppression, and Clinical Relevance**
  Dr. Peter Carlen, University of Toronto
- **Visualizing Spreading Depression During Fatal and Non-Fatal Seizures**
  Dr. Stuart Cain, University of British Columbia

| 12:30 p.m.      | **Lunch and Exhibits**                                                      |
| 12:45 p.m.      | **Poster Tour**                                                             |
| 1:45 p.m.       | **Top Trainee Abstract Presentations**                                      |
| Harbourfront Ballroom 3 | Chair: Dr. Paolo Federico, University of Calgary                           |

**LEARNING OBJECTIVES:**
- Appraise recent research projects in epilepsy.
- Develop critical thinking on results of research projects.
- Discuss the implications of recent research projects on current clinical practice in epilepsy.

1. **Is the Hemodynamic Response to Scalp Interictal Epileptic Discharges the Onset Zone of Intracerebral Interictal Discharges?**
   Hui Ming Khoo, Montreal Neurological Institute and Hospital
2. **Feasibility of Ultra-High Field MRI for Surgical Planning in Stereo-Electroencephalography**
   Jonathan Lau, Western University
3. **Brainstem Seizures and Associated Cardiorespiratory Depression Following Intra-hippocampal 4-AP Application in Freely Moving Rats**
   Wanida Nuwisait, University of Toronto
4. **Repeated Attenuation of Post-ictal Hypoxia: Effect on Behaviour and Brain**
   Marshal Wolff, University of Calgary
PROGRAM

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<td>3:00 p.m.</td>
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**SESSION 2-A**

**Harbourfront Ballroom 1**

Basic and Clinical Pharmacology of Newer Anti-Seizure Drugs
Chair: Dr. Jong M. Rho, University of Calgary

**LEARNING OBJECTIVES:**
- Review the fundamental mechanisms through which six newer anti-seizure drugs (ASDs) exert their clinical effects.
- Review the major drug interactions that could occur when newer ASDs are used in combination or with other non-epilepsy medications.
- Review the pivotal clinical trials that led to regulatory approval of newer ASDs.
- To describe both common and rare adverse side-effects of newer ASDs.
- To critically assess whether mechanisms of action matter with regard to clinical use of ASDs in general.

**TARGET AUDIENCE:** Neurologists, neurosurgeons.

**TOPICS AND SPEAKERS:**
- Mechanistic Overview of Anti-Seizure Drugs
  Dr. Tara Klassen, University of British Columbia
- Pharmacokinetic Profiles of Newer Anti-Seizure Drugs
  Dr. Jong M. Rho, University of Calgary
- Clinical Efficacy of Newer Anti-Seizure Drugs
  Dr. Jorge Burneo, Western University
- Adverse Effect Profiles of Newer Anti-Seizure Drugs
  Dr. Lionel Carmant, Université de Montréal

**SESSION 2-B**

**Harbourfront Ballroom 2**

Pre- and Post-Surgical Neuroimaging Diagnostics in Childhood and Adult Epilepsy
Chairs: Dr. Boris Bernhardt, McGill University

**LEARNING OBJECTIVES:**
- Review neuroimaging studies in children with drug-resistant epilepsies.
- Review functional and structural network analyses in patients with epilepsy.
- Relate imaging markers to SEEG and guidelines for effective ex vivo/in vivo studies.

**TARGET AUDIENCE:** Students, researchers, clinicians.

**TOPICS AND SPEAKERS:**
- Lesion Detection In Children and Adults with Drug-Resistant Seizures Based on Structural Imaging
  Dr. Dewi Schrader, University of British Columbia
- Functional Network Analysis in Epileptic Children Using Multimodal Imaging, SEEG and Surgical Pathology
  Dr. Roy Dudley, McGill University
- Integrating In Vivo, Ex Vivo MRI and Histology in Patients Undergoing Epilepsy Surgery
  Deepak Toor, Western University
- Connectome Analysis in Epilepsy
  Dr. Boris Bernhardt, McGill University
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### SESSION 2-C

**Port of HK/NY**

**175 Years of Riding West: Working Towards a Better Understanding of Infantile Spasms**  
Chairs: Dr. Morris H. Scantlebury, University of Calgary and Dr. Lionel Carmant, Université de Montréal

**LEARNING OBJECTIVES:**
- Review infantile spasms – clinical semiology, EEG and treatment options.
- Review the mechanisms of infantile spasms in light of advances in the development of rodent models and genetics.
- Discuss the developmental outcome of patients with infantile spasms and its management.
- Discuss how consensus guidelines, large databases, internet connectivity and shared data influence treatment decisions and outcomes in patients with infantile spasms.

**TARGET AUDIENCE:** Neurologists, pediatricians, clinical neurophysiologists and allied health providers.

**TOPICS AND SPEAKERS:**

**Infantile Spasms: Clinical Overview**  
Dr. Peter Camfield and Dr. Carol Camfield, Dalhousie University

**Neurodevelopmental Outcome in Infantile Spasms: Are we Making a Difference?**  
Dr. Lionel Carmant, Université de Montréal

**Rodent Models of Infantile Spasms and the Hunt for new Treatments**  
Dr. Morris Scantlebury, University of Calgary

**What do the Genetics of Infantile Spasms tell us about Mechanisms?**  
Dr. Elsa Rossignol, Université de Montréal

**Infantile Spasms in the Age of Guidelines, Pathways and Big Data**  
Dr. Carter Snead, University of Toronto

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**SESSION 3-A**

Port of HK/NY

CLAE-CBRET Joint Session

**LEARNING OBJECTIVES:**
- Identify seizures and patterns of uncertain clinical significance on regular EEG trace.
- Assess new tools available for long-term monitoring in particular trends.
- Recognize the difficulties and challenges to record prolonged EEGs in ICU settings.
- Determine whether a questionable finding is artifactual or not.

**TARGET AUDIENCE:** Physicians, nurses, neurophysiologist and EEG technologists.

**TOPICS AND SPEAKERS:**

- **Seizure Recognition and Patterns of Uncertain Clinical Significance in ICU: What is the New Trend?**
  Dr. Juan Pablo Appendino, University of Calgary

- **Is it Real or an Artifact? The Challenges of ICU Recording**
  Susan McGregor, Foothills Medical Centre

**SESSION 3-B**

Harbourfront Ballroom 1

**Stereotactic Ablative Techniques in Epilepsy Surgery**

Chair: Dr. David A. Steven, Western University

**LEARNING OBJECTIVES:**
- Review the different types of stereotactic lesioning techniques for epilepsy surgery.
- Review the indications for stereotactic lesioning techniques for epilepsy surgery.
- Review the effectiveness of stereotactic lesioning techniques for epilepsy surgery.
- Review the risks and limitations of stereotactic lesioning techniques for epilepsy surgery.

**TARGET AUDIENCE:** Neurosurgeons, neurologists, nurses and allied health care providers.

**TOPICS AND SPEAKERS:**

- **History of Stereotactic Ablative Techniques for Epilepsy**
  Dr. Andrew Parrent, Western University

- **Stereotactic Radiosurgery and High-Intensity Focused Ultrasound Ablative Techniques for Epilepsy**
  Dr. David A. Steven, Western University

- **MRI-Guided Laser Thermal Ablation for Epilepsy**
  Dr. Alex Weil, Université de Montréal
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<tr>
<td>SESSION 3-C</td>
<td>Women and Epilepsy</td>
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<td>Harbourfront Ballroom 2</td>
<td>Chair: Karen Legg, QEII Health Sciences Centre Halifax</td>
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**LEARNING OBJECTIVES:**

- Demonstrate competence in recommending an appropriate anti-seizure medication for teenage girls and young women and how to optimize vitamin supplementation in women of childbearing age with epilepsy.
- Review interactions between anti-seizure medications and oral contraceptives and awareness about birth control recommendations for women with epilepsy.
- Review aspects of managing epilepsy in pregnancy and counselling pregnant women with epilepsy.

**TARGET AUDIENCE:** Neurologists, nurses and allied health care providers caring for women with epilepsy.

**TOPICS AND SPEAKERS:**

- **Optimizing AED Selection and Vitamin Supplementation in Girls, Teenagers and Young Women**
  Dr. Anita Datta, University of British Columbia
- **Birth Control and AEDs**
  Elaine Wong, Children’s and Women’s Health Centre of British Columbia
- **Prenatal, Pregnancy and Postpartum Medication Management**
  Dr. Kristin Ikeda, Dalhousie University
- **Counselling Women with Epilepsy in Pregnancy**
  Jessica Rieckmann, University of Alberta

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<tr>
<td>7:30 p.m.</td>
<td>CLAE Reception and Gala Dinner: Celebrating Our 40th Anniversary</td>
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<td><em>(Tickets must be purchased in advance)</em></td>
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<td></td>
<td><strong>The Fairmont Hotel Vancouver</strong></td>
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<td>900 West Georgia Street</td>
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<td><strong>The Roof</strong></td>
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## PROGRAM

### Sunday, October 15, 2017

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<tr>
<th>TIME</th>
<th>DESCRIPTION</th>
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<tbody>
<tr>
<td>7:30 a.m.</td>
<td><strong>Breakfast</strong></td>
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<tr>
<td>Harbourfront Foyer</td>
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<tr>
<td>8:30 a.m.</td>
<td><strong>Challenging Topics in Epilepsy Surgery</strong></td>
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<tr>
<td>Harbourfront Ballroom 1</td>
<td>Chair: Dr. Matthew Wheatley, University of Alberta</td>
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<td><strong>PLENARY</strong></td>
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<td><strong>LEARNING OBJECTIVES:</strong></td>
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<tr>
<td></td>
<td>• Understand and appreciate the complexity of epilepsy and epilepsy surgery.</td>
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<td></td>
<td>• Appreciate the challenges associated with difficult issues in epilepsy surgery.</td>
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<td></td>
<td>• Understand some of challenges faced by neurologists and neurosurgeons after epilepsy surgery.</td>
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<td><strong>TARGET AUDIENCE:</strong> Neurologists, neurosurgeons, neurology and neurosurgery residents, nurses and allied health providers.</td>
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<td></td>
<td><strong>TOPICS AND SPEAKERS:</strong></td>
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<tr>
<td></td>
<td><strong>Bitemporal Epilepsy</strong></td>
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<tr>
<td></td>
<td>Dr. Yahya Agha-Khani, University of Calgary</td>
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<tr>
<td></td>
<td><strong>Insular Epilepsy</strong></td>
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<tr>
<td></td>
<td>Dr. Dang Nguyen, Université de Montréal</td>
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<tr>
<td></td>
<td><strong>Late Recurrence After Surgery – Antiepileptic Drug Withdrawal</strong></td>
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<td>Dr. Samuel Wiebe, University of Calgary</td>
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<td><strong>Cognitive or Memory Decline After Surgery</strong></td>
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<td>Dr. Mary Pat McAndrews, University of Toronto</td>
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<tr>
<td>10:15 a.m.</td>
<td><strong>Break and Exhibits</strong></td>
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<td>Harbourfront Foyer</td>
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<tr>
<td>10:45 a.m.</td>
<td>Breakout Sessions</td>
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<tr>
<td><strong>SESSION 4-A</strong></td>
<td><strong>Neuropathology of Epilepsy</strong></td>
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<tr>
<td>Harbourfront Ballroom 1</td>
<td>Chair: Dr. Harvey B. Sarnat, University of Calgary</td>
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**LEARNING OBJECTIVES:**
- Review the range of neuropathological lesions that might be demonstrated in resected brain tissues in the surgical treatment of focal epilepsy, including both classical focal cortical dysplasias (FCD) and recent findings to explain pathogenesis of epileptic networks, with clinical and neuroimaging correlations.
- Review the grades of hippocampal sclerosis at the microscopic level.
- Review recent findings of neuronal dispersion and synaptic plexi in the U-fibre layer beneath FCD that contribute to epileptic networks and distinguish them from heterotopia in deep white matter.
- Review the two most frequent epileptogenic tumours of the cerebral cortex.
- Review neuroimaging correlates of neuropathological lesions.

**TARGET AUDIENCE:** Neurologists, epileptologists, neurosurgeons, clinical neurophysiologists and neuroradiologists.

**TOPICS AND SPEAKERS:**
- **Neuropathology of Focal Cortical Dysplasias and Related Lesions**
  - Dr. Harvey B. Sarnat, University of Calgary
- **Neuroimaging of Focal Cortical Dysplasias and Related Lesions**
  - Dr. Andrea Bernasconi, McGill University

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<tr>
<th>SESSION 4-B</th>
<th>Parietal Lobe Epilepsy</th>
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<tr>
<td>Port of HK/NY</td>
<td>Chair: Dr. Dang Nguyen, Université de Montréal</td>
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**LEARNING OBJECTIVES:**
- Review the structural and functional connectivity of the parietal lobe.
- Review the semiology of seizures arising from major subdivisions of the parietal lobe.
- Review the value of non-invasive localization techniques in the investigation of parietal lobe epilepsy.
- Review the value of invasive EEG investigation of parietal lobe epilepsy: indications, methods and risks.
- Review the technical considerations, seizure outcomes and risks associated with parietal lobe epilepsy surgery.

**TARGET AUDIENCE:** Neurophysiologists, neurologists, epileptologists, neurosurgeons and trainees.

**TOPICS AND SPEAKERS:**
- **Structural and Functional Connectivity of the Human Parietal Lobe**
  - Jimmy Ghaziri, Université du Québec à Montréal
- **Semiology of Parietal Lobe Seizures**
  - Dr. Dang Nguyen, Université de Montréal
- **Non-Invasive and Invasive Investigations of Parietal Lobe Epilepsy**
  - Dr. François Dubeau, Montreal Neurological Hospital and Institute
- **Parietal Lobe Epilepsy Surgery**
  - Dr. Andrew Parrent, Western University
## PROGRAM

### Sunday, October 15, 2017

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<tr>
<td>10:45 a.m.</td>
<td>Breakout Sessions</td>
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<tr>
<td>SESSION 4-C</td>
<td><strong>Neuropsychiatric Aspects of Epilepsy: Addressing Challenges Across the Lifespan</strong></td>
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<tr>
<td>Harbourfront Ballroom 2</td>
<td>Chair: Dr. Islam Hassan, University of British Columbia</td>
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<td><strong>LEARNING OBJECTIVES:</strong></td>
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<tr>
<td></td>
<td>• Review the challenges presented by neuropsychiatric aspects of epilepsy in pediatric, adult and older adult patients.</td>
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<td>• Review recent updates on the diagnosis and management of various neuropsychiatric disorders in patients with epilepsy across the lifespan.</td>
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<td>• Review various models of integrating neuropsychiatric care into adult and pediatric epilepsy programs.</td>
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<td><strong>TARGET AUDIENCE:</strong> Neurologists, psychiatrists, psychologists, neuropsychologists, nurses, social workers.</td>
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<td><strong>TOPICS AND SPEAKERS:</strong></td>
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<tr>
<td></td>
<td><strong>Epidemiology of Neuropsychiatric Aspects of Epilepsy Across the Lifespan</strong></td>
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<td>Dr. Jose Tellez-Zenteno, University of Saskatchewan</td>
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<td><strong>Psychiatric Diagnosis and Management within a Pediatric Epilepsy Program</strong></td>
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<td>Dr. Andrea Chapman, University of British Columbia</td>
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<td><strong>Roles of the Neuropsychiatrist within an Adult Epilepsy Program:</strong></td>
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<td>Dr. Islam Hassan, University of British Columbia</td>
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<td><strong>The Impact of Neurocognitive Deficits in Older Adults with Epilepsy</strong></td>
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<td>Dr. Marilyn Jones-Gotman, McGill University</td>
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<tr>
<td>12:30 p.m.</td>
<td>On-the-Go Lunch</td>
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<td>Harbourfront Foyer</td>
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<td>12:30 p.m.</td>
<td>Corporate Advisory Lunch (by invitation only)</td>
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<td>Port of Vancouver</td>
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<td>ABSTRACT #</td>
<td>NEUROIMAGING</td>
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</table>
| 5          | **Multiple Subject Barycentric Discriminant Analysis: A New Metric for Ascertaining Whole Brain Network Atypicality**  
Lynne J. Williams¹, Danny Kim², Kevin P.V. Fitzpatrick², Bruce H. Bjornson²  
¹BC Children’s Hospital MRI Research Facility, BCCH Research Institute Brain Mapping  
²Neuroinformatics & Neurotechnology Laboratory, Division of Neurology, Department of Pediatrics,  
University of British Columbia |
| 6          | **Postictal Hypoperfusion Measured by MR Arterial Spin Labelling: Localization of the Seizure Onset Zone**  
Ismael Gaxiola-Valdez, Shaily Singh, Tefani Perera, Sherry Sandy, Emmy Li, Paolo Federico  
University of Calgary |
| 7          | **Temporal Lobe Epilepsy: Microscopic Hippocampal Anomalies Modulate Whole-Brain Pathoconnectomics**  
Boris Bernhardt, Min Liu, Seok-Jun Hong, Andrea Bernasconi, Neda Bernasconi  
Montreal Neurological Institute |
| 8          | **Multimodal Neuroimaging Models for Lateralization of Temporal Lobe Epilepsy**  
Mohammad-Reza Nazem-Zadeh¹, Kost Elisevich², Hamid Soltanian-Zadeh²  
¹Henry Ford Health System, Detroit  
²Spectrum Health Medical Group, Grand Rapids |
| 9          | **The Use of Measurements from the Temporal Lobe Pole to Posterior Structures of the Temporal Lobe in Surgical Planning for Anterior Neocortical Amygdalohippocampectomy: A Magnetic Resonance Imaging Study**  
Paulo Henrique Pires de Aguiar¹23, Rogério Aires¹34, Iracema Araújo Estevão⁵, Bruno Camporeze⁵,  
Rene Arikawa⁶, Rui Castello Branco Pinheiro⁶, Fábio Jundy Nakasone⁶, Carlos Tadeu Parisi de Oliveira⁷  
¹Department of Neurosurgery, Santa Paula Hospital  
²Department of Neurology, Pontifical Catholic University of São Paulo  
³Department of Neurosurgery, Public Servant Hospital of São Paulo  
⁴Department of Neurosurgery, Bandeirantes Hospital  
⁵Medical School of São Francisco University, Bragança Paulista  
⁶Department of Radiology, Santa Paula Hospital  
⁷Department of Neurosurgery, São Francisco University Hospital |
| 10         | **Application of High Frequency Oscillation and Interictal Epileptiform Discharges in Simultaneous Intracranial EEG-fMRI**  
Negar Mohammadi¹, Daniel J. Pittman², Ismael Gaxiola-Valdez², Shaily Singh², Yahya Agha-Khani²,  
Paolo Federico⁴  
¹University of Calgary  
²Seaman Family MR Centre, Hotchkiss Brain Institute, Foothills Medical Centre, Calgary  
³Department of Clinical Neurosciences, University of Calgary, Calgary; Foothills Medical Centre,  
Calgary  
⁴Department of Clinical Neuroscience, Hotchkiss Brain Institute, University of Calgary; Seaman  
Family MR Centre, Hotchkiss Brain Institute, Foothills Medical Centre |
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<tr>
<th>ABSTRACT #</th>
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| **11**     | Understanding Clinical Epileptogenesis – Is There any Role in Searching for Subtle Hippocampal Structural Changes in First Seizure Populations?  
Mandeep Ghuman¹, Matthias Schmidt¹, Crocker Candice², Karen Legg³, Bernhard Pohlmann-Eden⁴  
¹Department of Diagnostic Radiology, Dalhousie University  
²Department of Psychiatry, Dalhousie University  
³Division of Neurology, Department of Medicine, Halifax Infirmary, Queen Elizabeth Health Sciences Centre  
⁴Dalhousie University, Brain Repair Centre, Halifax |
| **12**     | Arterial Spin Labelling (ASL) Perfusion MRI in the Pre-Surgical Evaluation of Pediatric Epilepsy: Lesional vs. Non-Lesional Cases  
Patricia Tomaszewski¹, Roy Dudley², Jeremy Moreau¹, Sylvain Baillet¹, Pia Wintermark²  
¹McGill University  
²McGill University Health Network |
| **13**     | Post-ictal Hypoperfusion Measured by CT Perfusion Imaging  
Emmy Li¹, Ismael Gaxiola-Valdez¹, Chris d’Esterre¹, Ting Lee², Paolo Federico¹  
¹University of Calgary  
²Robarts Research Institute |
| **14**     | At our Institution, Does Repeat 3T MRI Improve Diagnostic Yield when Compared with 1.5T in Patients with Refractory Epilepsy?  
Elaine Ni Mhurchu, Jason Shewchuk  
VGH |
| **15**     | Seizure Onset Zone Localization by Comparing Patient Postictal Hypoperfusion to Healthy Controls  
Tefani Perera¹, Ismael Gaxiola-Valdez¹, Shaily Singh¹, Madison Milne-Ives¹, Sherry Sandy¹, Emmy Li², Paolo Federico³  
¹University of Calgary  
²Hotchkiss Brain Institute, University of Calgary; Seaman Family MR Research Centre, University of Calgary; Department of Neuroscience, University of Calgary  
³Hotchkiss Brain Institute, University of Calgary; Seaman Family MR Research Centre, University of Calgary; Department of Clinical Neurosciences, University of Calgary; Department of Neuroscience, University of Calgary; Department of Radiology, University |
| **16**     | High Field Structural MR Imaging in Focal Epilepsy: Do 3 T Scans Improve Diagnostic Yield over 1.5T Scans?  
Hanjie Zhu¹, Ismael Gaxiola-Valdez¹, James Scott², Alison Hurley², Paolo Federico³  
¹University of Calgary  
²Alberta Health Services  
³University of Calgary Department of Clinical Neurosciences |
17  The Creation and Early Life of an Adult Epilepsy Monitoring Unit  
Gillian Reid McDonald  
The Ottawa Hospital

18  Standardizing Practice for Safety in the EMU: Describing the Quality Improvement Initiative for Nursing Practice Recommendations by the Canadian Epilepsy Nursing Group (CENG)  
Margo DeVries-Rizzo¹, Michael Reid²  
¹Paediatric Neurology, London Health Sciences Centre  
²University of Western Ontario

19  Vulnerability to Mania: a Lower Threshold for Concern on the Epilepsy Monitoring Unit  
Islam Hassan, Manouchehr Javidan, Farzad Moien Afshari  
University of British Columbia

20  Thought Disturbances in Epilepsy: A Dimensional Approach  
Islam Hassan¹, Tiffany Townsend², Jing Tan¹, Chantelle Hrazdil¹  
¹University of British Columbia  
²Health PEI

21  Resolution of Pseudobulbar Affect due to Petrous Meningioma After Temporal Lobectomy for Epilepsy  
Islam Hassan, Ramesh Sahjpaul, Jing Tan, Farzad Moien Afshari  
University of British Columbia

22  Transient Resolution of Motor and Vocal Tics following Left Temporal Lobectomy for Treatment of Refractory Epilepsy  
Shadi Kiaei¹, Mowad Benguzzi, Siddarth Nosib², Farzad Moien Afshari¹  
¹University of British Columbia  
²University of Saskatchewan

23  Carbamazepine-Induced Dyskinesias Confused for Seizures  
Chantelle Hrazdil, Islam Hassan, Farzad Moien Afshari  
University of British Columbia

24  The Critical Importance of Implementing a First Seizure Clinic in a Comprehensive Epilepsy Program: Key Learnings from the Halifax Experience  
Bernhard Pohlmann-Eden¹, Karen Legg²  
¹Dalhousie University, Brain Repair Centre  
²Division of Neurology, Department of Medicine, Halifax Infirmary

25  A Patient-General, Low-Complexity Seizure Anticipation Algorithm  
David Groppe¹, Gerard O’Leary¹, Roman Genov², Jose Luis Perez Velazquez², Taufik Valiante⁴  
¹Krembil Neuroscience Centre  
²University of Toronto  
³The Hospital for Sick Children  
⁴Krembil Neuroscience Centre
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| 26         | Amygdalar Physiological Alterations Parallel Interictal Emotional Impairment Associated with Seizures  
Roberto Colangeli, Maria Morena, Jordan Farrell, Matthew Hill, Campbell Teskey  
University of Calgary |
| 27         | Carbon Dioxide and Oxygen as a Potential Treatment for Postictal Hypoxia  
Thomas Phillips, Renaud Gom, Cambell Teskey, Jeff Dunn  
University Of Calgary |
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35  The Burden and Predictors in Drug Resistant Epilepsy: A Systematic Review and Meta-Analysis
Bushra Sultana¹, Genevieve Gore², Colin Josephson³, Nathalie Jetté³, Mark Keezer¹

¹Centre Hospitalier de l’Université de Montréal (CHUM)
²McGill University
³University of Calgary

36  A Longitudinal Cohort Study on the Impact of the Clobazam Shortage on Patients with Epilepsy: A Patient Perspective
Sara Lukmanji¹, Khara M. Sauro², Colin B. Josephson¹, Samuel Wiebe¹, Nathalie Jetté², K. Chelsea Altura³

¹Department of Clinical Neurosciences and Hotchkiss Brain Institute, University of Calgary
²Departments of Clinical Neurosciences and Community Health Sciences, and O’Brien Institute for Public Health, University of Calgary
³Department of Clinical Neurosciences, Hotchkiss Brain Institute

37  withdrawn

ABSTRACT #  PEDIATRIC EPILEPSY

38  The Psychodevelopmental Impact of Epilepsy: Eriksonian Formulations at Different Ages
Islam Hassan, Farzad Moien Afshari, Chantelle Hrazdil
University of British Columbia

39  Intracranial InfraSlow Activity Using Depth Electrode Recordings of Eight Pediatric Patients with Frontal Lobe Epilepsy
Luis Bello Espinosa¹, Walter Hader², Silvia Kozlik¹

¹Alberta Children’s Hospital
²University of Calgary

40  Psychosocial and Dietary Support Group for Caregivers of Patients on the Ketogenic Diet: Topics and Caregiver’s Feedback
Carol Pereira, Jennifer Fabe
McMaster Children’s Hospital

41  Mutations in Infants 0 to 3 Years of Age with New Onset Epilepsy
Sandra Reiter-Campeau, Madelyn Barton, Lionel Carmant
CHU Ste-Justine

42  The Efficacy and Tolerability of the Ketogenic Diet in Treatment of Epileptic Spasms after Failure of Steroids and Vigabatrin
Qi Xu, Linda Huh, Cassie McFarlane, Alex Printis
University of British Columbia, BC Children’s Hospital

43  Targeted Therapy for Treatment Refractory Epilepsy in a Neonate with KCNT1 Mutation Associated with Poor Response to Quinidine but Marked Improvement to Potassium Bromide
Qi Xu, Jonathan Smith, Leeza Looned, Michelle Demos, Anita Datta
BC Children’s Hospital, University of British Columbia
POSTERS

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44 Determining the Needs of Epilepsy Patients, Caregivers and Healthcare Providers using the Ketogenic Dietary Therapy
Alexandra Panicucci1, Samar Mouaaz1, Carol Pereira2, Jennifer Fabe2
1University of Toronto
2McMaster Children’s Hospital, Hamilton Health Sciences

45 Is a Single-Item Measure as Valid and Reliable as Multi-Item Scales in Assessing Quality of Life in Children with Epilepsy?
Lauryn Conway1, Elysa Widjaja1, Mary Lou Smith2
1The Hospital for Sick Children
2University of Toronto

ABSTRACT # BASIC SCIENCE / ENGINEERING

46 EEG Changes after Repetitive Mild Blast Injury in Rats
Jackie Liu1, Eugene Park2, Elisha Krauss1, Andrew Baker1, Aylin Reid4
1University Health Network
2St. Michael’s Hospital
3St. Michael’s Hospital, University of Toronto
4University Health Network, University of Toronto

47 Postictal Hypoperfusion/Hypoxia as a Mechanism of Sudden Unexpected Death in Epilepsy and Pharmacological Intervention with a COX-2 Inhibitor
Antis George, Alexandra K. Wall, Jordan S. Farrell, Campbell Teskey
University of Calgary, Cumming School of Medicine

48 Vagal TRPV1-Mediated Respiratory Alkalosis Increases Susceptibility to Hyperthermic Seizure
Karlene Barrett, Arijit Roy, Keelin Rivard, Richard Wilson, Morris Scantlebury
University of Calgary

49 COX-2 Oxygenation of Endocannabinoids Mediates Postictal Hypoxia
Jordan S. Farrell1, Roberto Colangeli1, Kwaku Addo-Osafio1, Maria Morena1, Philip J. Kingsley2, Toni A. Patrick4, Sachin Patel2, Lawrence J. Marnett2, Keith A. Sharkey1, Matthew N. Hill1, Campbell Teskey1
1Hotchkiss Brain Institute, University of Calgary
2Vanderbilt University

50 Potassium Redistribution in Neocortex In Vivo: the Role of Gap Junctional Communication
Azin Ebrahimp Amini1, Iliya Weisspapir2, Bojana Stefanovic3, Paolo Bazzigaluppi4, Peter Carlen2
1Faculty of Biomedical Engineering, University of Toronto
2Fundamental Neurobiology, Krembil Research Institute, University Health Network
3Physical Sciences, Sunnybrook Research Institute, Toronto; Department of Medical Biophysics, University of Toronto
4Fundamental Neurobiology, Krembil Research Institute, University Health Network, Toronto; Physical Sciences, Sunnybrook Research Institute, Toronto
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| 51        | **Canadian Pediatric Epilepsy Surgery Survey: Are We Doing More Surgery in Children? A Long-Term Follow-up Study**  
Sandra Wahby¹, Nathalie Jetté², Mark Keezer³, Khai-Tuan Andrew Bui⁴, Alain Bouthillier²  
¹University of Calgary  
²Foothills Medical Centre, University of Calgary  
³Hôpital Notre-Dame, Centre Hospitalier de l’Université de Montréal  
⁴Université de Montréal |
| 52        | **A Nation-Wide Audit of Epilepsy Surgery for Adults**  
Khai-Tuan Andrew Bui¹, Nathalie Jetté², Alain Bouthillier³, Walter Hader², Mark Keezer³  
¹Université de Montréal  
²University of Calgary  
³Centre Hospitalier de l’Université de Montréal |
| 53        | **Depth Versus Subdural Electrodes for Intracranial Electroencephalographic Monitoring in the Presurgical Investigation of Drug-Refractory Epilepsy**  
Holger Joswig, Andrew Parrent, Keith W. MacDougall, Jorge Burneo, David A. Steven  
London Health Sciences Centre |
| 54        | **First Institutional Experience with Robot-Assisted Implantation of Depth Electrodes for Stereoelectroencephalography**  
Holger Joswig, Jonathan Lau, Carolyn M. Benson, Andrew Parrent, David A. Steven  
London Health Sciences Centre |
| 55        | **Technical Note: Stereotactic Leksell Frame-Based Depth Electrodes Implantation for Stereoelectroencephalography**  
Holger Joswig, Carolyn M. Benson, Andrew Parrent, Keith W. MacDougall, David A. Steven  
London Health Sciences Centre |
| 56        | **Filling the Gap in Post-Surgical Epilepsy Care: A Needs Assessment Study of Post-Surgical Epilepsy Patients**  
Sumayya Mehmood¹, Craig Dale², Monica Parry², Carter Snead³, Taufik Valiante⁴, Rosalee Smith⁵  
¹University of Toronto  
²Lawrence S. Bloomberg Faculty of Nursing, University of Toronto  
³The Hospital for Sick Children, University of Toronto  
⁴Toronto Western Hospital, University of Toronto, Krembil Research Institute  
⁵Adult Services, Epilepsy Toronto, Ontario |
| 57        | **Anatomical Study of Complete Callosotomy in Fresh Cadaveric Brain Specimens: Technical Note**  
Paulo Henrique Pires de Aguiar¹,²,³, Rogério Aires¹,³,², Luis Roberto Mathias⁵, Iracema Araújo Estevão⁵, Bruno Camporeze⁵, Mariano Carolina de Melo⁵, Romeu Fadul⁵,⁷, Fábio Jundy Nakasone¹, Marcos Vinicius Califat Maldaun²  
¹Department of Neurosurgery, Santa Paula Hospital  
²Department of Neurology, Pontifical Catholic University of São Paulo  
³Department of Neurosurgery, Public Servant Hospital of São Paulo  
⁴Department of Neurosurgery, Bandeirantes Hospital  
⁵Medical School of São Francisco University, Bragança Paulista  
⁶Department of Surgery, Clinical Hospital of São Paulo University  
⁷Department of Surgery, Sírio Libanês Hospital |
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Funds in support of this CPD Activity have been provided as an Educational Grant to the Canadian League Against Epilepsy Scientific Meeting. The funds were independently allocated and disbursed in accordance with current UBC CPD Support Guidelines.
CLAE 2018
Scientific Meeting

Save the Date

September 21 to 23, 2018
Delta Hotels St. John’s Conference Centre

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CANADIAN LEAGUE AGAINST EPILEPSY