# CLAE CONNECTIONS

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## Canadian League Against Epilepsy

## MESSAGE FROM THE PRESIDENT



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My term as the president of the CLAE will end in October 2014. It has been a real pleasure and a privilege serving on the CLAE board and I thank you all for giving me the opportunity and support. The deadline for the call for nominations for the Director of Education, President Elect. Secretary, Treasurer and student representative was September 15, 2014. We are now in the process of organizing the elections.

Over my 6 years of involvement in the Executive Board, I have seen

a lot of progress in all aspects of the structure and organization of the CLAE. We now have a dedicated organization management, the membership numbers have grown, the biennial meetings have been planned consistently, we have been involved in annual support of multiple educational activities such as fellowship awards, research awards and have lead the epilepsy course at the CNSF Annual Meetings. We now have a quarterly newsletter, selflessly made possible by our Editor in Chief. Many of our members have been nationally and internationally recognized for their excellent work in epilepsy research and advocacy.

While recognizing all of these accomplishments I am fully aware that a lot more still needs to be done. To have our presence on the international stage, we need to have more collaboration amongst our members to address pressing scientific questions, create more guidelines for best practices, have partnerships with grassroot organizations to increase awareness about epilepsy and last but not the least, avail all opportunities to speak up for the cause of our epilepsy patients. With your dedication and engagement I stay optimistic that we will achieve these goals.

Best Regards,

S Nizam Ahmed, MD, FRCPC





## CLAE FELLOWSHIP AWARD WINNER 2014: DR NITA

By Dr Dragos Nita, MD, PhD, FRCPC



I graduated from "Carol Davila" University in Bucharest, Romania in 2001. From very early on in my training, I have been passionate about neuroscience and, more specifically, about how acute injuries are related to functional changes of the neuronal networks. During my medical studies I completed three research projects, two of them using neurophysiologic techniques to assess changes in cerebral networks following ischemia, and one focused on biochemical biomarkers for oxidative stress and lipid peroxidation in continuous and repetitive ischemic brain injury.

I came to Canada in 2001 in order to pursue a PhD in Neurobiology at Laval University in Québec City, under the supervision of Prof. Mircea Steriade who invited me to join his lab. After he passed away in 2006, I finalized some of my research projects with Prof. Igor Timofeev. My PhD thesis focused on the cellular bases and network dynamics in trauma related epilepsy, synaptic plasticity and epileptogenesis. The outcome of my PhD consisted of 15 published peer-reviewed papers, 1 invited review and 3 book chapters.

In 2008, I became a Neurology resident at the University of Toronto and The Hospital for Sick Children in Toronto and I served as Neurology Chief Resident between 2011 and 2012. During my residency, my research focused on assessing the state of the cortical networks in comatose children. In 2012, I obtained the Canadian Society of Clinical Neurophysiologists certification in EEG and in

2013, after being certified in Neurology by the Royal College of Physicians and Surgeons, I joined the Hospital for Sick Children for an Epilepsy Fellowship.

The CLAE /UCB Canada Inc. 2014 Post Graduate Fellowship Award will allow me to dedicate my second year of fellowship to a research project under the supervision of Dr. Cecil Hahn, that aims at determining which quantitative EEG biomarkers are predictive for seizures, seizure recurrence, and neurological outcomes in comatose children with clinical or subclinical seizures. I will focus on a large cohort of continuous EEG data and the clinical outcomes on 260 children who presented in coma to the intensive care unit; some of whom went on to develop epilepsy. The overall goal of this project is to provide clinicians with an online bedside tool to identify subpopulations at risk for seizures or adverse neurological outcomes that require early or intensive management..

The training environment here brings together a unique combination of clinical expertise in the intersection of coma and epileptogenicity in paediatric patients, scientific expertise in computational neuroscience, and human neurophysiology. This training will provide a capstone to the combination of my scientific and clinical training, by providing a unique skillset for translating experimental neurophysiology to clinical practice through the use of advanced computational approaches for the analysis of EEG data.

My long-term career goal is to establish myself as an independent clinician-scientist in the field of Translational Neuroscience. It is my ambition to establish a competitive research program where I will conduct research that will further the understanding of the cellular and network mechanisms involved in brain reorganization following injury with the ultimate goal of improving patient care and safety.



### 'WHY I CHOSE A CAREER IN EPILEPSY?



Dr. Robyn Whitney is in her final year of training in Pediatric Neurology at McMaster University. Robyn will begin her pediatric epilepsy fellowship at the Hospital for Sick Children in July 2015. She graduated from McMaster University with a Bachelor of Health Sciences degree in 2007 and her MD in 2010. During residency she served as the chief resident and was involved in various research projects related to pediatric epilepsy. Robyn hopes to eventually practice as a pediatric epileptologist in an academic setting.

Next July, I will begin a two-year fellowship in pediatric epilepsy at the Hospital for Sick Children. I have been invited to reflect on my career choice, pediatric epilepsy.

I distinctly recall my first experience with a child with epilepsy, a three-year old boy who would suddenly drop to the ground. His diagnosis: Doose Syndrome, a diagnosis that was new to me. As a second year medical student, I was intrigued...

As a trainee in the Pediatric Neurology Program at McMaster Children's Hospital, I have been fortunate to have had a diverse and varied exposure to pediatric neurology. However, it was the children with epilepsy and their families that I found myself most drawn toward.

As my training progressed, it became evident that epilepsy was not just characterized by an underlying tendency for seizures, but also by an array of social, psychological and cognitive difficulties. Epilepsy can have significant impacts on quality of life, which was frequently illustrated in the patients and families that I encountered. I have found such encounters to be some of the most rewarding interactions, but also some of the most challenging, both diagnostically and therapeutically.

As a resident, I learned early from one of my mentors, Dr. Ramachandrannair that each case of epilepsy that I would see in my training was unique. With each interaction, there was always something new to learn and I carried this piece of wisdom throughout my training. The opportunity for continued knowledge growth and its application has also influenced my decision. It is exciting to be part of a field that is rapidly evolving and where new advancements continue to be made, which ultimately affects the care of our patients.

With continued developments, we are able to offer our patients, a number of new and expanding treatment options from new antiepileptics to dietary therapies and surgery and with these interventions we are able to have a positive impact on their lives. Additionally, our knowledge on the underlying etiologies of epilepsy is also expanding, such as in the field of epilepsy genetics, which has now helped provide clues as to the cause of epilepsy in selected patients. It is satisfying to share these successes with our patients.

However, there is still much to learn and many questions yet to be answered, which provides a number of opportunities for discovery in the field. With a career in pediatric epilepsy, there is the opportunity to be involved in clinical practice, which is highly diverse, in addition to research. There is the opportunity to educate health care professionals, our patients and the community, which is of interest to me. Finally, the practice setting is varied, allowing one to work either in an academic center or the community.

Ultimately, it is the field of pediatric epilepsy that I find most fascinating. My decision to follow this path has been influenced by many factors, some of which I have outlined. I know that my future in pediatric epilepsy will provide me with a challenging and rewarding career.



#### CLAE BIENNIAL MEETING, LONDON, ONTARIO

#### Day 1: October 17th 2014 (FRIDAY)

5:00 pm Annual General Meeting

6:00 pm Dr. Nizam Ahmed (CLAE President)

6:15 pm Presidential Lecture (Dr. Nathalie Jette, incoming CLAE President)

6:45 pm Dr. Michael Poulter: Improving the relationship between Basic Scientists and Clinicians

7:00 pm Dr. William Stacey: Understanding seizures: new theories, technologies, and techniques

8:00 pm Wrap up for the day

#### Day 2: October 18th, 2014 (SATURDAY)

7:00 am Breakfast

8:00 am PLENARY SESSION

Epilepsy in Canada: How are we doing? (Chair: Dr. Sharon Whiting, University of Ottawa)

10:00 am Break

10:15 am BREAKOUT SESSIONS

Session 1 Epileptic Encephalopathies (Chair: Dr. Rajesh RamachandranNair, MacMaster University)

Session 2 Video-EEG Monitoring in Critically-ill Patients (Chair: Dr. Dang K Nguyen, University of Montreal)

12:00 pm LUNCH

1:00 pm Poster Tour (Authors to stand by their posters)

2:00 pm BREAKOUT SESSIONS

Session 1: SIG: Surgical Failures (Chair: Dr. Andrew Parrent, Western University)

Session 2: Stigma, Barriers and Driving (Chair: Dr. Jeffrey Jirsch, University of Alberta)

3:45 pm Break

4:00 pm BREAKOUT SESSIONS

Session 1: Neuroengineering and Epilepsy (Co-Chairs: Dr. Michael Poulter, Western University & Dr. Peter Carlen, University of Toronto)

Session 2: Genetic Counseling in Epilepsy (Chair: Dr. Eva Andermann, McGill University)

5:45 pm Wrap up for the day

6:00 pm Social hour: A Tour/visit to The Canadian Medical Hall of Fame

7:00 pm Dinner (London Convention Center)

#### Day 3: October 19th, 2014 (SUNDAY)

7:30 am Breakfast

8:30 am PLENARY SESSION: Special Session from the Canadian Epilepsy Alliance

Working Together to Improve Epilepsy Care in Canada (Moderator: Gail Dempsey, CEA President)

10:00 am Break

10:15 am BREAKOUT SESSIONS

Session 1: Controversies & Advances in Neuroimaging of Epilepsy (Chair: Dr. Kobayashi, McGill University & Dr. A Khan, Robarts Research Insti

tute)

Session 2: Ictal Semiology (Chair: Dr. Jorge G Burneo, Western University)

12 noon Wrap up



## Canadian League Against Epilepsy

The Canadian League Against Epilepsy is an organization of medical and basic sciences professionals including physicians, basic scientists, nurses, neuropsychologists, neuroradiologists, students and other healthcare professionals.

#### **Board of Directors**

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#### NOTE FROM YOUR EDITOR

The next issue of CLAE Newsletter (December 2014) will include meaningful and relevant information to CLAE members, including but not limited to the following:

- CLAE Stars: A member who has received local, national or international recognition for his/her research, teaching, innovation or advocacy.
- 2. Innovative new programs and services (clinical, research or advocacy). These include, but are not restricted to: new major regional/institutional or provincial clinical programs, new research themes, platforms, consortium and networks, outreach programs in vulnerable/marginalized communities, innovative educational programs and advocacy initiatives/projects.
- 3. Major publications by Canadians in the field of epilepsy during the last six months.
- 4. Information on epilepsy meetings, and epilepsy related social events.
- 5. Information on recruitment of patients for research studies and opportunities for research, educational and clinical collaboration.
- 6. Success and success stories in major grant competitions.
- 7. Colleagues we recently lost /an In Memorium section.

If you are interested in contributing and providing content to the CLAE Newsletter, please contact Rajesh Ramachandran Nair (rnair@mcmaster.ca) before November 15, 2014.

Thank you

Rajesh RamachandranNair, MD, FRCPC

Editor-in-Chief, CLAE Connections

### **EDITOR'S PICK:**

#### NOTABLE PUBLICATIONS FROM CANADA IN 2014

Patterns and frequency of the treatment of depression in persons with epilepsy. Fiest KM, Patten SB, Altura KC, Bulloch AG, Maxwell CJ, Wiebe S, Macrodimitris S, Jetté N. Epilepsy Behav. 2014 Sep 6;39C:59-64.

Epilepsy transition: Challenges of caring for adults with childhood-onset seizures. Borlot F, Tellez-Zenteno JF, Allen A, Ali A, Snead OC 3rd, Andrade DM. Epilepsia. 2014 Aug 28. doi: 10.1111/epi.12752.

Feasibility of using an online tool to assess appropriateness for an epilepsy surgery evaluation. Roberts JI, Hrazdil C, Wiebe S, Sauro K, Hanson A, Federico P, Pillay N, Murphy W, Vautour M, Jetté N. Neurology. 2014 Sep 2;83(10):913-9.

#### **UPCOMING PROGRAMS**

American Epilepsy Society 68th Annual Meeting - December 5-9, Seattle, Washington

https://www.aesnet.org/meetings\_events/annual\_meeting/general\_info

Epilepsy Surgery in Children: Impact of Brain Development & Pathology. Cleveland Convention Center and Global Center for Health Innovation. 5-8 October, 2014

Website: www.ccfcme.org/epilepsy14