# CLAE CONNECTIONS

JUNE 21, 2013; VOLUME 1: ISSUE 2



# Canadian League Against Epilepsy

# MESSAGE FROM THE PRESIDENT

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As we approach the ILAE meeting in Montreal, it is very heartening to see the active participation of many of the CLAE members. From chairing plenary and educational sessions, interactive workshops, poster and platform sessions or recipient of awards of excellence, our members are visible on all forums. This is reflective of the passion and sincere commitment of the membership towards enhancing the life of those living with epilepsy.

Dr Maria Siddiqi is the recipient of the CLAE fellowship 2013-14 award funded by UCB pharmaceuticals. I extend my congratulations to Dr Siddiqi and sincere gratitude to UCB for their ongoing support. As advertised in the last newsletter, the next CLAE Biennial Meeting will be in 2014 in London Ontario from October 17 to 19th. We will be sending out calls for proposals by the fall of 2013. Please stay tuned.

At CLAE we are all committed to improve epilepsy research in Canada, increase epilepsy training and research opportunities for the new graduates, facilitate collaboration among the membership and be strong advocates for patients with epilepsy through partnership with Canadian Epilepsy Alliance and all grass root organizations. We need both your financial, personal and in-kind support to make it possible. For those of you who have not paid their membership dues, I humbly request that you do so promptly. I also request all members to consider donating to CLAE be-



yond their membership fee to help our administration and educational programs run smoothly.

I look forward to seeing all of you in Montreal for the ILAE meeting in June

Best Regards,

S. Nizam Ahmed, MD, FRCPC





## MARIA SIDDIQUI IS THE WINNER OF THE 2013-2014 Clae Fellowship



Maria Siddiqui, MD is the winner of the 2013-2014 CLAE epilepsy fellowship award. Dr Siddiqui is pursuing a clinical and research fellowship in epi-

lepsy at the University of Alberta under the supervision of Drs Jeff Jirsch and Nizam Ahmed. She graduated from the University of Karachi and subsequently completed residency training in Neurology at the Dow University of Health Sciences, Pakistan. *"I am very grateful to the CLAE for providing an opportunity to complete my*  research project related to epilepsy and autoimmunity". Dr Siddiqui's career goal is to train as an epileptologist and practice in an academic setting. *"I am* very passionate about clinical research in epilepsy with an ultimate goal to improve the quality of life of patients with epilepsy".

#### MEET YOUR 'PRESIDENT ELECT'



Nathalie Jette, MSc, MD, is an Associate Professor in Neurology at the University of Calgary, and a member of the Hotchkiss Brain Institute and Institute for Public Health. She completed her training at Columbia University (Epilepsy and EEG Fellowship), University of Ottawa (Neurology residency and medical school) and McMaster University (MSc in Neurosciences and BSc in Biology). She is an epilepsy specialist and a health services researcher. She holds a Canada Research Chair in Neurological Health Services Research and an Alberta Innovates Health Solutions (AIHS) Population Health Investigator Award. She enjoys teaching the future generation of physicians, neurologists, epidemiologists and health services researchers, currently supervising 9 graduate students (4 MSc and 5 PhD) and sitting on several other graduate student committees. She has been the recipient of over 25 research, teaching and clinical awards in the past five years, including Calgary's Top 40 under 40 Award. As part of her research program, she is studying appropriateness of care in epilepsy, health resources use and access to care in epilepsy, comorbidities (particularly mental health), outcomes of epilepsy, and is involved in the development of national surveillance programs for neurological conditions, including epilepsy. Her team recently developed a web-based tool

(www.epilepsycases.com) aimed at helping physicians identify patients who may be candidates for an epilepsy surgery evaluation. Dr. Jette is currently funded by Alberta Health and Wellness, Alberta Health Services, AIHS, the Canadian Institutes of Health Research, the Hotchkiss Brain Institute, the Public Health Agency of Canada and the University of Calgary. She sits on the Editorial Board of Epilepsia. She was a member of the CLAE Education Committee from 2010-2012. Her involvement in activities related to the International League Against Epilepsy are substantial and provide important expertise in her new role as President-Elect of the Canadian League Against Epilepsy. She is Chair of the International League Against Epilepsy (ILAE) Task Force on Stigma in Epilepsy, co-Chair of the ILAE Task Force on Epilepsy Guidelines, a member of the ILAE North American Regional Commission since 2010 and Chair of the Public Health Agency of Canada Neurological Disease Surveillance Advisory Committee.

As President-Elect of the CLAE, Dr. Jette looks forward to advancing the mission of the CLAE of enabling "Canadians affected by epilepsy to live a life that is not limited by their condition". Her research intensive background and focus of research provides her with a solid foundation to work with our members in identifying and addressing the gaps and unmet health care needs faced by Canadians affected by epilepsy. Most importantly, she highlights the importance of working with key stakeholders (patients, Canadian Epilepsy Alliance, ILAE) to remove misconceptions about epilepsy (and its associated stigma) by continuing to educate Canadians about epilepsy and its consequences (an important mission of the CLAE). She is also keen to work with our community of researchers to ensure that key discoveries and best practice recommendations (e.g. diagnostic, therapeutic, etc.) are effectively translated in a timely manner.



# **RISING STARS**

In this issue of CLAE Connections we introduce Dr. Morris Scantlebury, MD; University of Calgary

Dr. Morris Scantlebury is an assistant professor in the Departments of Paediatrics and Clinical Neurosciences at the University of Calgary. He also is a paediatric neurologist at the Alberta Children's Hospital in Calgary and is a member of the Alberta Children's Hospital Research Institute for child and maternal health with a lab in the developmental epilepsy research program.

Dr. Scantlebury has a broad background in pediatric epilepsy research, specifically in the development and characterization of animal models of pediatric epilepsy syndromes. After completing medical training and internship at the University of the West Indies he moved to Canada where he did a short stint as a postdoctoral fellow in the laboratory of Dr. W. M. Burnham in Toronto. It was there that he became familiar with many of the techniques used in basic research in epilepsy and the desire to become a research scientist was seeded. He then moved to Montreal to pursue postdoctoral studies in the laboratory of Dr. Lionel Carmant. In Dr. Carmant's laboratory he developed a model of atypical febrile seizures induced in rats with a prior neocortical freeze lesion. For these studies he was supported by a CIHR/Epilepsy Canada fellowship and was recognized for this research with several awards including an American Epilepsy Society (AES) Award for Excellence in Pediatric Epilepsy Research in addition to the AES young investigator award.

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#### DID YOU KNOW? ROYAL ASSENT WAS OBTAINED AN YEAR AGO!



#### EDITOR'S PICK: NOTABLE PUBLICATIONS FROM CANADA IN 2013 (JAN-JUNE)

High-frequency oscillations, extent of surgical resection, and surgical outcome in drug-resistant focal epilepsy. Haegelen C, Perucca P, Châtillon CE, Andrade-Valença L, Zelmann R, Jacobs J, Collins DL, Dubeau F, Olivier A, Gotman J. *Epilepsia.* 2013;54(5):848-57. EEG Department, Montreal Neurological Institute, Montreal, Quebec, Canada.

Abnormal white matter correlates with neuropsychological impairment in children with localizationrelated epilepsy. Widjaja E, Skocic J, Go C, Snead OC, Mabbott D, Smith ML. *Epilepsia.* 2013;54 (6):1065-73. Diagnostic Imaging, Hospital for Sick Children, Toronto, Ontario, Canada; Division of Neurology, Hospital for Sick Children, Toronto, Ontario, Canada.

Systematic review and meta-analysis of standard vs selective temporal lobe epilepsy surgery. Josephson CB, Dykeman J, Fiest KM, Liu X, Sadler RM, Jette N, Wiebe S. *Neurology*. 2013;80 (18):1669-76. Department of Medicine, Division of Neurology, Dalhousie University, Halifax, Canada



All's

..Dr. Scantlebury then worked in Dr. Solomon Moshé's laboratory to develop a model of the infantile spasms syndrome. After a laboriously extensive review of the literature and painstaking effort he developed the first validated animal model of symptomatic infantile spasms. This research was supported by Parents Against Childhood Epilepsy and finally Drs. Scantlebury and Moshé were awarded a NIH R21 grant to validate the model and to conduct initial studies to screen for new treatments. After developing the model Dr. Scantlebury went on to complete a residency in Pediatric Neurology at the Albert Einstein College of Medicine and a fellowship in Pediatric Epilepsy at the Alberta Children's Hospital.

Dr. Scantlebury's current research focuses on the validation and optimization of the ketogenic diet in the animal models of infantile spasms and to rapidly translate his results to clinical practice. These studies are currently being funded by the Alberta Children's Hospital Research Institute .Dr. Scantlebury is excited to see what the data will show and intends to use the knowledge gained from these studies to develop safer, less toxic treatments for infantile spasms.



#### BRENDA MILNER: PIONEER OF COGNITIVE NEUROSCIENCE

## By Mary Lou Smith, PhD, Professor, Department of Psychology, University of Toronto

Brenda Milner has had a career spanning over 60 years at the Montreal Neurological Institute and McGill University, where she is the Dorothy J. Killam Professor of Neurology and Neurosurgery. Much of the work from Dr. Milner's lab has emanated from the study of patients with epilepsy. Her research has been influential in leading to discoveries on the underlying neural basis of perception, memory, language and executive function. It is informative to look back at Dr. Milner's early life and the beginning stages of her career to understand the factors that led her to her discipline and motivated her love of science and discovery.

Dr. Milner describes her early life in The History of Neuroscience in Autobiography1. She grew up in Manchester England, the only child of parents who loved music (her father was a music critic for the Manchester Guardian). Much to their disappointment, she was almost tone deaf. At an early age, she began to learn German and French, the latter keeping her in good stead when she eventually moved to Montreal as a young woman. At the age of 15, the British school system mandated that she choose between science and the humanities. She loved classics and said that had her school offered Greek, she would have chosen that route; it did not, and thus she chose mathematics and physics. She believed that it was possible to learn and enjoy foreign languages and literature on one's own, but that to pursue science one needed to be within a structured program. Indeed, she later also learned to speak Italian, and she remains a voracious reader. Dr Milner attended Cambridge University, starting out studying mathematics, but at the end of her first year, realizing that she would not shine in that field, considered a switch to logic and philosophy. A practical member of the faculty pointed out the difficulty of making a living within that field, and suggested that she consider psychology. At the time psychology was a relatively new discipline, but for her, this choice was an excellent one. She was fascinated that the field offered her the tools and methodologies to study behaviour. Oliver Zangwill supervised the latter part of her undergraduate studies and interested her in the value of investigating patients with brain lesions, imparting his belief that understanding the function of the normal brain could be arrived at by studying abnormal function. Her studies were interrupted by the outbreak of WWII and she was employed by the Ministry of Supply at the Radar Research and Development Establishment. During this time she met her future husband Peter Milner who after the war offered a position to initiate research in atomic energy in Canada, the opportunity which brought them to this country.

In Montreal, Dr. Milner first worked at the Université de Montreal, where she taught in the Institut de Psychologie. However, the approach at the institute was very clinical, and although she continued to teach there, in 1949 she entered the PhD program at McGill, where she was supervised by Donald Hebb. Hebb had convinced Wilder Penfield to allow one graduate student to study patients who



who had undergone epilepsy surgery, and this opportunity was offered to Dr. Milner. As she described it, "...I knew immediately that this was the kind of work I wished to pursue.... Meantime, the only advice Hebb gave me was to make myself as useful as I could... The rest was up to me" (1, p. 283). And as it is said, the rest is history; she went on to become recognized as a founder of and leading researcher in the fields of Neuropsychology and Cognitive Neuroscience.

Dr. Milner's early research interest at the MNI concerned perceptual deficits in patients with right temporal lobe lesions. However, working closely with Dr. Penfield she studied in depth two patients who had marked global memory loss after a unilateral temporal lobe excision. They hypothesized that there had been an undetected abnormality in the contralateral temporal lobe (later confirmed by autopsy on one of the patients). After learning of these cases at a meeting in 1955, Dr. William Scoville invited Dr. Milner to come to Hartford to study his patient HM in whom he had carried out a bilateral medial temporal lobe resection. Her work with HM drew attention to the importance of the medial temporal lobe structures for memory, defined the amnesic syndrome associated with damage to these structures, and laid the foundation for the emergence of the study of multiple memory systems. In parallel, she and her students continued to elucidate the specializations within the cortex for visual and verbal memory, auditory processing, somesthesis, the adaptation of the intracarotid amobarbital procedure to assess memory, the complex cognitive and behavioural functions of the frontal lobes, and plasticity of language representation. Her lab was always full of enthusiastic graduate students and post docs, enhanced by frequent visits of distinguished neuroscientists from around the world.

Generations of scientists have benefited from Dr. Milner's dedication to training, and in 2007 she created the Brenda Milner Foundation at the Montreal Neurological Institute to support young researchers in cognitive neuroscience. As a supervisor and mentor, Dr. Milner's effectiveness lies in inspiring her trainees with her own motivation, determination, hard work and clear enthusiasm for science. She is open to hearing new ideas and new approaches, and she loves to look at new data. When I was a graduate student in her lab in the late '70's to mid'80's, she prided herself on being a "string and sealing wax" type of researcher (i.e., using simple materials and methods, a holdover from her early days when there was little money to support research programs), yet she allowed her students to adopt newer technologies and eventually found herself delving into studies involving advancing imaging tools such as PET and fMRI. Dr. Milner has always valued the contributions of animal research, emphasizing the complementary nature of the ability to look at the complexity of human behaviour and the precision possible in lesion work in animal models. She emphasized the importance of observation of behaviour and listening to what patients said as sources of inspiration for asking good research questions.

Dr. Milner's writing is exquisite, each sentence clear and informative. However, being a perfectionist, writing papers has always been a slow process for her. I remember as a graduate student going to her office and seeing the same page in the typewriter at exactly the same spot, awaiting sometimes for weeks the inspiration that would allow her to go on. She demanded the same perfection in her students, and writing a thesis or paper with her entailed detailed and often line-by-line editing. We called her the "Manchester Filter". knowing that anything that finally met her approval was good. We quaked at the sight of a wavy line alongside a paragraph, a signal that the writing (or thinking) was not clear, but she couldn't quite put her finger on what to recommend to improve it; these pages we had to take away to sweat over at length. The ultimate reward was to see a small check mark in the bottom right hand corner of a page - the seal of approval.

Numerous national and international awards and prizes have been given to Dr. Milner in recognition of her excellence. To provide just a sample of the recognition she has received, the list includes: membership in the Canadian Science and Engineering Hall of Fame, the 2010 Norman A. Anderson Lifetime Achievement Award from the Society of Experimental Psychologists, Fellow of the Royal Societies of London and Canada, Foreign Associate of the US National Academy of Sciences, the Pearl Meister Greengard Prize for recognition of female scientists who have made exceptional contributions to biomedical science, NSERC Medal of Excellence, the prestigious International Balzan Prize, the Gairdner Award, the Goldman-Rakic Prize for Outstanding Achievement in Cognitive Neuroscience, the Izaak Walton Killam Memorial prize of the Canada Council, Companion of the Order of Canada, and numerous Honorary degrees.

Now nearing her 95th birthday, Dr. Milner is still working at the Neuro, and she has two post- doctoral fellows in her lab. These days she is fascinated by hemispheric interaction in cognitive processes. Although she is studying this topic through functional neuroimaging with normal subjects, it is perhaps fitting that a recent focus in epilepsy research is the topic of connectivity of large circuits. We may yet see another intersection of Dr. Milner's research with the field of epilepsy.





# 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.

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#### NOTE FROM YOUR EDITOR

The third issue of CLAE Newsletter (September 2013) will include meaningful and relevant information to CLAE members, including but not limited to the following:

1. 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 6 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 (mair@mcmaster.ca) before August 15, 2013.

Thank you.

Rajesh RamachandranNair, MD, FRCPC

Editor-in-Chief, CLAE Connections

## UPCOMING PROGRAMS

Sudden Unexpected Death in Epilepsy (SUDEP) Professional Development Day for Epilepsy Support Organization Workers and Non-physician Epilepsy Care Providers

Increasingly, people with epilepsy, their families and caregivers are asking for information about SUDEP. To help answer these questions, encourage discussion, provide consistent messaging and keep informed of latest developments, SUDEP Aware will host a SUDEP Professional Development day for members of the Canadian Epilepsy Alliance and nonphysician care providers of epilepsy treatment centers across Canada.

With presentations from leading experts in the field and interactive

discussion periods, the day will aim to provide valuable insight into the issues concerning SUDEP, as well as the tools and knowledge share to best assist and support the 300,000 families living with epilepsy in Canada.

This event is open to non-physician carers who support epilepsy families (such as clinic RNs, advanced practice nurses, social workers, epilepsy support organization staff) and will take place June 27 2013, in Montreal, to coincide with the International Epilepsy Congress.

To register, or for more information, please contact Deb at SUDEP Aware on 1-855-85-SUDEP (78337), ext 2 or email pdday@sudepaware.org Book ASAP as spaces are limited!

# 30th International Epilepsy Congress,

Palais des congres de Montreal

June 23-27, 2013

#### www.epilepsymontreal2013.org

CME accreditation: The 30th International Epilepsy Congress has been approved for up to 29 credits by the Office for Continuing Health Professional Education (CHPE).

## American Epilepsy Society Annual Meeting, 2013

December 6-10, Washington DC , Washington Convention Center



The next CLAE Biennial Meeting will be held in London, Ontario from October 17-19, 2014. This would be a joint meeting with the Canadian Epilepsy Association. Please mark your calendars.









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#### Paediatric Neurologist Western University, Schulich School of Medicine & Dentistry Department of Paediatrics

The Department of Paediatrics, Schulich School of Medicine & Dentistry, is seeking a Paediatric Neurologist with a strong interest in paediatric epilepsy, to provide clinical, educational and scholarly leadership for inpatient and outpatient neurology services and undergraduate and postgraduate paediatric neurology education at Children's Hospital, LHSC. The major responsibilities of the successful candidate will be leading our regional epilepsy service, including supervising our EEG laboratory and advancing our growing epilepsy surgery service. The candidate must be eligible for or have certification in the CSCN EEG examination or have an equivalent qualification. Having experience of subdural monitoring and the medical aspects of epilepsy surgery would be an advantage. The successful candidate will also fulfill the role of educator and role model for our undergraduate medical students and paediatric residents. Children's Hospital will offer an extremely competitive financial package to the successful candidate.

Children's Hospital, LHSC is a state-of-the art healthcare facility (<u>http://www.lhsc.on.ca/About\_Us/Childrens\_Hospital</u>/), and is the sole tertiary care healthcare centre between Toronto and Winnipeg. We serve a population of over 500,000 children and youth.

London has a population of 465,000 people with a diverse cultural mix, and the amenities of a big city but with the benefits of a small town <a href="http://www.youtube.com/watch?v=f">http://www.youtube.com/watch?v=f</a> Kb vsIEIY. London is located in the heart of the beautiful Great Lakes region and is a 2 hour drive from Toronto and Detroit. <a href="http://www.goodmovelondon.com">http://www.goodmovelondon.com</a>.

Candidates for this position must have an MD or equivalent degree and must be eligible for licensing in the Province of Ontario. Specialist certification in Paediatric Neurology from the Royal College of Physicians and Surgeons of Canada or equivalent is required. If needed, assistance will be available for obtaining immigration and licensing requirements. Successful candidates will hold a full time clinical academic appointment. We offer competitive remuneration. Salary and rank will be commensurate with experience and qualifications at the time of appointment.

Please submit your application, including curriculum vitae, statement of career goals, highlights of accomplishments and three reference letters to:

Guido Filler, MD, FRCC Professor and Chair, Department of Paediatrics Schulich School of Medicine & Dentistry Email: Guido.Filler@lhsc.on.ca

Positions are subject to budget approval. Applicants should have fluent written and oral communication skills in English. All qualified candidates are encouraged to apply; however, Canadian and permanent residents will be given priority. Western University is committed to employment equity and welcomes applications from all qualified women and men, including visible minorities, aboriginal people.