



## **CNSF Strategic Plan Summary**

## **Vision**

The improved wellbeing of children and adults with diseases, disorders and injuries of the nervous system and the prevention of these conditions.

## Mission

To support the neuroscience professions in Canada, and particularly those members of the CNSF's Societies, through education, advocacy, membership services and research promotion.

#### NOTES ABOUT THE MISSION:

EDUCATION includes the annual CNSF Congress, The Canadian Journal of Neurological Sciences (The Journal), and all other continuing professional development (CPD) activities.

ADVOCACY includes activities such as building public awareness about diseases, disorders and injuries of the nervous system, and advocacy for improved public policy and increased medical research. Such advocacy may be direct or in collaboration with other organizations, including the Neurological Health Charities of Canada.

MEMBERSHIP SERVICES include services delivered to the four constituent Societies of the CNSF and their individual members, the services offered to Society members, the research to identify member needs, and other related activities.

RESEARCH PROMOTION includes clinical research undertaken in partnership with other organizations.

## **Values**

#### **EXCELLENCE IN EDUCATION**

Continuing professional development is a cornerstone of the success of the individual practitioner, the profession and the member societies. Accordingly, all of the CNSF's educational efforts must reflect excellence in their quality, relevance and delivery.

#### REPRESENTATIVE AND INCLUSIVE

The CNSF is a federation of Societies representing diverse and collegial medical professionals with a common focus on diseases, disorders and injuries of the nervous system. Accordingly, the CNSF must reflect and engage these Societies and their members in how it works and what it does.

#### A STRONG AND EFFECTIVE VOICE

The wellbeing of individuals with diseases, disorders and injuries of the nervous system and, where possible, the prevention of these conditions, comprise an important vision. The work of the member societies and their respective members is also important. The CNSF must advocate with a strong and effective voice knowing that its mission and vision have unique and important value to society.

#### RESPONSIBLE STEWARDSHIP

The CNSF's financial resources are secured from the dues paid by the professionals of its constituent Societies and from commercial sponsors who support its vision and mission. The CNSF has an obligation to the professionals of its constituent Societies to manage these resources wisely, maintain good governance practices, and conform to the standards established on behalf of society by the responsible agencies (e.g. governments, the RCP&SC, provincial and territorial regulatory bodies).

## Messages from the CNSF President & CEO



It is once again time for the Annual Edition of the **NEURO | NEWS**. Time seems to fly by. It has been a busy year, with lots of positive motion.

As you know, the Journal was outsourced to Cambridge University Press in 2014. The CJNS is now online only. The move has been a successful one, and since then the CNSF has saved a lot of money and, more importantly the CJNS has expanded its readership and improved its impact factor by 30% to 1.55.

Once again, a lot of thought and effort have been put into organizing the annual Congress. This year, we welcomed Alex Henri-Bhargava onto the Scientific Program Committee, as Vice Chair. He, along with Chair Tejas Sankar, have brought innovation and energy to the fore. The program for this year's congress is outstanding, and I encourage all of you to attend. There are brand new Courses this year, and major innovations to come.

In this 'annual edition', let me once again take the opportunity to thank our sponsors who contribute so generously towards the CNSF and our Congress. There would not be a Congress without their 'unconditional' support. Please take the time to visit the Exhibit Hall and thank our many supporters and view new innovations in the Neurosciences.

I want to also thank the members of the CNSF who teach at our sessions/ courses and present their research at the Congress. You are participating in the education of your peers, and your dedication and contribution to the CNSF is appreciated by both the attendees and the organizers. I thank you personally for your efforts.

This year, the number of abstracts received was near an all-time high, and we hope that the attendance will be as well. Quebec City is a wonderful place to

We have decreased the price for Resident registration and this seems to have had a positive effect.

The Residents are our future, and I look forward to the many innovations we are planning for 2017 to get them involved in the Congress at all levels.

This year I would like to share some of the accomplishments of our member societies. The CNSS has been working on a position paper on the right to die, and there will be a joint symposium on the subject at our Congress. Dr Guy Rouleau and McGill, through the CNS and the support of the CNSF, are making a bid for the World Congress of Neurology. As well, the World Federation of Neurology and the Canadian Neurological Society are announcing a New Department Visit Program to provide educational opportunities for young Neurologists living in Central and South America. The Canadian Neurological Society will be the host society of this department visit program.

Many of our members are working on the Choosing Wisely campaign and would love more members to participate. Others are looking at developing guidelines or approving guidelines from other societies or adapting them to the Canadian reality. Please let us know if you want to get involved.

Please help us make the **NEURO | NEWS** great by submitting any interesting news or studies that you are aware of, and let us know of any projects you would like to involve your colleagues in.

I hope you enjoy the content of this newsletter and all the related CNSF information.

And, I hope to see all of you at the Congress in Quebec City. I know that this year's Congress will be outstanding.

Yours Truly,

Jeanne Teitelbaum President **CNSF** 

**NEURO | NEWS** is a bi-monthly publication of the CNSF which is used to communicate relevant CNSF and member Society activities, member profiles, information on the Journal and activities of our major Committees such as Continuing Professional Development, Scientific Program, Advocacy, Clinical Practice Guidelines and provide information and highlights of the Congress. We also utilize the **NEURO | NEWS** to promote Membership services and benefits, and acknowledge the support that "industry" provides to the CNSF throughout the year.

**NEURO | NEWS** is intended to more clearly and succinctly detail CNSF activities and how the volunteers comprising the CNSF Board and the CNSF Committees are working hard on your behalf to provide you with the many benefits of joining one, or more, of the four Societies which comprise the Federation.

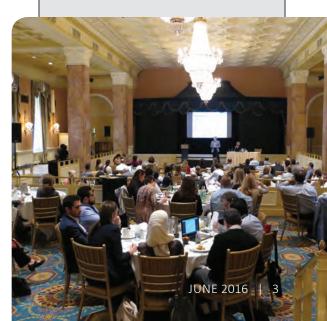
We hope you find this 'annual edition' of the **NEURO | NEWS** both informative and of value.

Thank you.

Dan Morin

Chief Executive Officer

**CNSF** 









Jeanne Teitelbaum CNSF/NSFC PRESIDENT **CNS Member** 



J. Max Findlay CNSF/NSFC PAST PRESIDENT **CNSS Member** 



Sharon Whiting CNSF/NSFC VICE-PRESIDENT CACN + CSCN Member



Kesh Reddy CNSF/NSFC VICE-PRESIDENT **CNSS Member** 



Michael Hill CNSF/NSFC VICE-PRESIDENT **CNS Member** 



Dan Morin **CNSF/NSFC BOARD MEMBER CNSF CEO** 



Juliette Hukin CNSF/NSFC BOARD MEMBER **CACN President** 



Cecil Hahn CNSF/NSFC BOARD MEMBER **CACN Vice-President** 



Colin Chalk **CNSF/NSFC BOARD MEMBER CNS President** 



Fionna Costello **CNSF/NSFC BOARD MEMBER CNS Vice-President** 



lan Fleetwood **CNSF/NSFC BOARD MEMBER CNSS President** 



Stephen Lownie **CNSF/NSFC BOARD MEMBER CNSS Vice-President** 



Jose Tellez-Zenteno **CNSF/NSFC BOARD MEMBER CSCN President** 



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Kristine **Chapman CNSF/NSFC BOARD MEMBER CNSF At-Large** 



Chris **Ekong CNSF/NSFC BOARD MEMBER CNSF At-Large** 



Joe Megyesi **CNSF PDC CHAIR CNSS Member** 



Tejas **Sankar CNSF SPC CHAIR CNSS Member** 



Robert Chen CJNS EDITOR-IN-CHIEF CNS + CSCN Member



Richard Riopelle **CNSF ADVOCACY CHAIR** CNS Member



Shobhan Vachhrajani **CNSF CPGC CHAIR CNSS Member** 



Theo Mobach **CNSF/NSFC BOARD MEMBER CNS** Resident Rep



Leyila Kaseka **CNSF/NSFC BOARD MEMBER CACN** Resident Rep



Bill Wang **CNSF/NSFC BOARD MEMBER CNSS Resident Rep** 



## 2016 Congress Planning Committee

The Canadian Neurological Sciences Federation (CNSF) is composed of 4 Societies: Canadian Neurological Society (CNS), Canadian Association of Child Neurology (CACN), Canadian Neurosurgical Society (CNSS), and the Canadian Society of Clinical Neurophysiologists (CSCN).

Members from each of the 4 Societies have representation on the Professional Development Committee (PDC) and the Scientific Protram Committee (SPC) which together comprise the 2016 Congress Planning Committee.

Joe Megvesi | CNSF PDC Chair Aleksandra Mineyko | CNSF PDC Vice-Chair Tejas Sankar | CNSF SPC Chair Alexandre Henri-Bhargava CNSF SPC Vice-Chair Chintankumar Shah | CACN PDC Rep Shannon Venance | CNS PDC Rep Rudolf Arts | CSCN PDC Rep Craig Campbell | CACN SPC Rep James Perry | CNS SPC Rep

Gelareh Zadeh | CNSS SPC Rep Danielle Andrade | CSCN SPC Rep Seved Mirsattari | CSCN SPC Rep Leyila Kaseka | CACN Residents Rep Bill Wang | CNSS Residents Rep Theo Mobach | CNS Residents Rep **Kesh Reddy** | CNSF Vice-President **Sharon Whiting** | CNSF Vice-President Jeanne Teitelbaum | CNSF President Dan Morin | CNSF CEO

## WE LOOK FORWARD TO AN EXCITING & **INFORMATIVE 2016 CONGRESS!**

## Highlights of the 2016 CONGRESS

Informed by feedback from attendees at the 2015 Congress, the SPC met on a bi-monthly basis beginning in summer 2015 to iron out the program for the 2016 Congress, Several innovative additions are now part of the Congress program, including:

- A joint CNS/CNSS session on Physician Assisted Death
- Clinical Case Studies focused on interactive and practical discussions of clinically-relevant scenarios
- Novel, multidisciplinary courses: Tumor-related Epilepsy, Innovations in Neuroscience Education, Disorders of Consciousness, Neuro-infectious diseases.

## **CNSF Distinguished Service Award**

Dr. G Bryan Young

This is an award given to a senior member of the CNSF who has made an outstanding, notable or special contribution to the Canadian Neurological Sciences Federation, and to the Federation's Societies or the CJNS (Journal); through participation in the CNSF's committees, involvement in the Congress, performance of administrative duties, or involvement in promoting the CNSF and its member societies.

Bryan joined the Canadian Neurological Society in 1976 during his neurology residency, and joined the Canadian Society of Clinical Neurophysiologists in 1978. He has served as Secretary-Treasurer and President of the CSCN. He was a member of the CJNS Editorial Board for many years and then became Editor-in-Chief from 2007-2013. Bryan served on the CNSF Board of Directors from 1990-1996 and again from 2007-2013.

He has also chaired Task Forces for the Guidelines for the Diagnosis of Brain Death and for National Standards for EEG, which were published in the CJNS.

He has Chaired and presented at numerous educational sessions at the CNSF Congress over the past 30 years. In 1991, Charles Bolton and Bryan founded the Canadian Neurocritical Care Group, which has continued to flourish as an affiliate Society of the CNSF under the capable leadership of Draga Jichici and Jeanne Teitelbaum.

Bryan continues to contribute articles and to review manuscripts for the CJNS.





## Benefits of Membership

#### **COMMUNITY OF CLINICAL NEUROSCIENTISTS**

The community of clinical neurologists, neurosurgeons, pediatric neurologists and neurophysiologists is a robust and growing family that has made a long-standing, international, and ongoing contribution to clinical neuroscience. The community provides continuing medical education for its members, teaching for residents, students and clinical fellows. There is strong clinical and discovery-based research in Canada. Networking in this group provides opportunity for training (e.g. fellowships), for collaboration across the country and for mutual learning.

#### **ANNUAL CONGRESS**

Our Federation, assisted by the Professional Development and the Scientific Program Committees, hosts an Annual Canadian Congress geared towards the continued professional development learning needs of Neurologists, Neurosurgeons, Pediatric Neurologists, Neurophysiologists and Neuroscientists. Our Congress is an accredited learning activity; therefore you earn Continuing Maintenance of Certification credits. Gather with your colleagues and friends from across the country. Learn, Mentor, Share, Teach, Collaborate, Advocate. Members attend the CNSF Annual Congress at a generously discounted registration fee which is generally a saving equal to your Society membership.

#### **ANNUAL SOCIETY PRIZES**

Members have the opportunity to win valuable Society prizes by submitting Abstracts to the Congress and papers to the Society competitions. There are 6 first place prizes available to Junior members or an Active member within two years of receiving their certificate. Each valued at approximately \$2500. Winners have the privilege of presenting their work at a Platform session at the Congress. There are also \$500 second place prizes which may be awarded.

All details and submission information is available in the "Call for Abstracts" online.

#### THE CANADIAN JOURNAL OF NEUROLOGICAL SCIENCES

The Canadian Journal of Neurological Sciences is the official publication of our four member Societies. The Journal is an internationally recognized, peer reviewed medical journal. Members receive an online subscription to the Canadian Journal of Neurological Sciences (CJNS).

CNSF Members and Journal subscribers have exclusive access to the most current year of this publication.

If an author requests immediate open access for an article, in accordance with CIHR Granting requirements, the repository upload fee is \$2,000 / article for first open access repository upload. CNSF Members pay only \$1,000 for this service if requested.

# Members have access to additional information on our CNSF website using their password login

Our website contains Congress information, Advocacy information and general Society information. The site includes: access to CJNS Journal articles back to Issue 1 in February 1974. View Neuro Careers postings, Society Newsletters, Society Prize information, access for annual dues payments, Society Governance items (such as council representatives and their responsibilities), Member Directories, Society bylaws, resource links, calendar of events, and more.

## CNSF & The Affiliates & Associates

The CNSF and its **Affiliate Societies** work collaboratively whenever possible throughout the year. The CNSF values and appreciates this partnership.

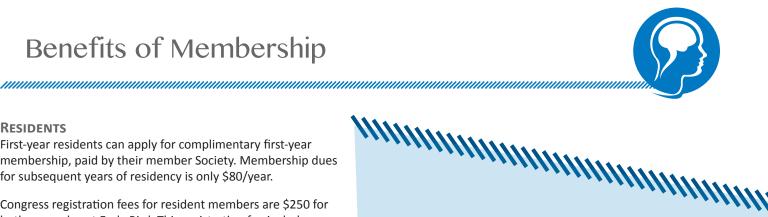
One of the most important tasks the Affiliates undertake is to assist the CNSF, when requested, in providing leadership and planning for Congress sessions which fall within their area of expertise. They are:

- Canadian ALS Research Network (CALS)
- The Canadian Brain Tumour Consortium
- The Canadian Headache Society
- The Canadian League Against Epilepsy
- The Canadian Movement Disorders Group
- The Canadian Network of MS Clinics
- The Canadian Neurocritical Care Society
- The Canadian Neuromuscular Group
- The Canadian Stroke Consortium
- The Consortium of Canadian Centres for Clinical Cognitive Research (C5R)

**Associate Societies** of the CNSF are professional societies that have similar goals to the CNSF. They are:

- Canadian Association of Neuroscience Nurses (CANN)
- Canadian Association of Electroneurophysiology Technologists Inc. (CAET)
- The Association of Electromyography Technologists of Canada (AETC)
- Canadian Association for Neuroscience (CAN)
- Canadian Association of Physical Medicine & Rehabilitation (CAPM&R)

## Benefits of Membership



#### **RESIDENTS**

First-year residents can apply for complimentary first-year membership, paid by their member Society. Membership dues for subsequent years of residency is only \$80/year.

Congress registration fees for resident members are \$250 for both pre and post Early Bird. This registration fee includes access to all Congress courses/sessions, course notes, luncheons, breaks and the Residents Social. Non member resident rates are \$775, so this benefit of membership is substantial.

Residents also help organize a resident social event. At this event, senior staff discuss their careers, Fellowship directors with positions to fill are looking to meet interested residents and will be available to discuss Fellowship options and career opportunities. This is a major networking event, specifically designed for CNSF residents.

Resident members also receive the 'benefits' listed in the sections explained above.

The CNS, CNSS and CACN, all have a resident representative that sits on the CNSF Professional Development and Scientific Program Committees, which determine the scientific program for each year's Congress. The resident representative attends the CNSF Board of Directors meetings, as well as their respective Society Board meetings.

Resident members are welcome to contact their society resident representative with any issues, concerns or ideas that they would like to see discussed.

#### **NEW INITIATIVES:**

A mentorship program for resident members interested in Journal article review is being considered by the Editor of the Journal. Resident members will be paired with senior reviewers on pertinent submissions. This program should be in place in 2016.

Currently, CNSS provides two (2) \$500 prizes for the best Platform Abstract and two (2) \$500 prizes for the best Poster Abstract. We are looking to expand this to CACN and CNS for 2017.

## **Our Member Societies**

CNSF members belong to one, or more, of our four constituent Societies:

**CANADIAN NEUROLOGICAL SOCIETY (CNS)** 



CANADIAN ASSOCIATION OF CHILD NEUROLOGY (CACN)



CANADIAN NEUROSURGICAL SOCIETY (CNSS)



CANADIAN SOCIETY OF CLINICAL NEUROPHYSIOLOGISTS (CSCN)



The four member societies of the CNSF are the actual 'owners' of the Federation and the CJNS Journal.

Not a member of the CNSF? (CNS, CACN, CNSS, CSCN)

Would you like to become a member of one of the CNSF Societies?

Would you like to take advantage of these Benefits of Membership? Just download the appropriate Society Application form by choosing your society of interest at:

www.cnsfederation.org or contact Donna Irvin at: donna-irvin@cnsfederation.org



#### **Escalier du Faubourg**

Also known as the Sainte-Claire or Le Soleil Stairs, Escalier du Faubourg was built out of wood some time before 1858 and rebuilt in iron in 1889. The current version dates back to 1931. In the opinion of historian Yves Beauregard, this three-level staircase is the city's "most graceful and soaring." From the top, you'll have a splendid view of the Saint-Roch district and the Laurentian mountain range. You'll notice a portrait of the mayor of the time (1882–1890), François-Charles-Stanislas Langelier, built into the iron arch decorating the stairs.

#### **Lépine Stairs**

Built out of wood in 1857, this stairway was demolished and rebuilt in iron in 1883. Officially given the name Lépine in 1986 after a nearby funeral home, this stairway is undeniably one of Québec City's loveliest. The finely worked wrought iron arches at each end seem woven out of floral symbols. They also bear the names of the prominent citizens who made the construction possible. The arch at the bottom is the original, while the one at the top is a copy.

Some claim that at one time you could witness a strange spectacle while descending the stairs. In back of the funeral home, fresh corpses were washed outside. Truth? Or urban legend?

#### **Number of Steps:**

Charles-Baillargé Stairs	35
Escalier du Faubourg	99
Lépine Stairs	118
Breakneck Stairs	59
Escalier de la Pente-Douce	133
Cap-Blanc Stairs	398

#### **Breakneck Stairs**

The Breakneck Stairs linking côte de la Montagne with rue du Petit-Champlain were built in 1635, making this the city's oldest stairway. In 1660, this staircase appears on a map of the village that grew into Québec City. The stairs have been restored several times since then, including once in 1889 by the city's celebrated architect and engineer Charles Baillargé. Local residents gave it the name Breakneck because of the steep incline.

#### **Cap-Blanc Stairs**

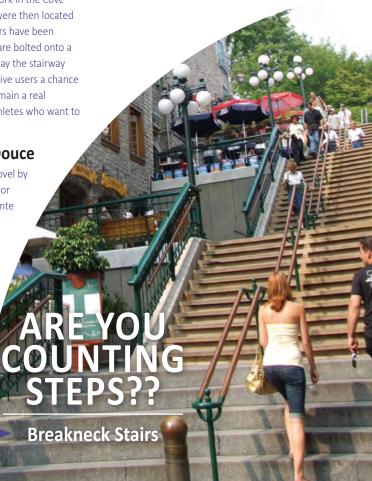
Québec City's longest staircase was built out of wood in 1868. At the time, it was used by the workers of the Cap-Blanc district to walk to work in the Cove Fields munitions factories, which were then located on the Plains of Abraham. The stairs have been rebuilt many times, because they are bolted onto a rock wall subject to rockslides. Today the stairway includes a number of landings to give users a chance to catch their breath. The stairs remain a real challenge for joggers and other athletes who want to test their physical condition.

#### Escalier de la Pente-Douce

This stairway was named after a novel by Roger Lemelin, a Québec City author whose first novel, Au pied de la pente douce (The Town Below, literally "at the foot of the gentle slope"), was published in 1944. It dealt with daily life and the colorful characters of his Québec City neighborhood, Saint-Sauveur, and was quite controversial at the time.

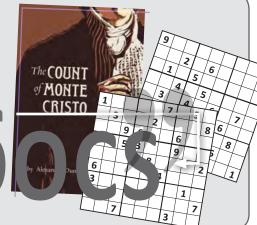
#### **Charles-Baillargé Stairs**

In 1980 this stairway was named for Charles Baillargé, Québec City's architect and engineer from 1866 to 1899. He was responsible for numerous structures now considered part of the city's heritage, including several stairways. Formerly known as the Buade Stairs, these received an outstanding facelift based on 1893 plans by Baillargé himself. To get to them, go down impasse du Chien d'Or to the corner of rue Buade. The stairs take you to côte de la Montagne, from where you can admire historic surroundings that include parc Montmorency, rue des Remparts, and the Québec Seminary.



We asked two CNSF members for their views on work and life.

# Here's what they had to say...





Ian Fleetwood Clinical Associate Professor advice you have received? Victoria General Hospital

Was there a defining moment that lead you to choose the

#### neurosciences as your career, and why?

For me it was the first surgical case on the first day of my first neurosurgery rotation as a third-year medical student at St. Boniface General Hospital in Winnipeg (November 2, 1992). Drs. Norman Hill and Monica Furer were operating on a pilocytic astrocytoma in an 17 year old girl in the sitting position... And the rest is history.

#### What is your favorite book and why?

"The Last of the Crazy People" by Timothy Findley. This was a page-turner for me and had me engaged on the same level as "To Kill a Mockingbird" and "The Catcher in the Rye". Highly recommended.

## What was the greatest piece of

In my final year of residency, Dr. Mike Hunter at Foothills Hospital in Calgary advised me

at the scrub sink one morning to protect my personal time and realize that there is always someone else who can do the job if you are not there... Like most of us, I'm not sure that I followed his advice, but as I look back over the first half of my career, those were definitely words of wisdom.

#### What do you do when you have down time?

I don't really have down time. I coach minor hockey and I'm on the Executive of our local minor hockey association, which is nearly a full time job! I've been working hard for the last couple years on establishing a female hockey program in Saanich, which was lacking when I moved here 4 years ago. We've tripled our female enrollment in the last two years, so we are starting to achieve a critical mass to move forward successfully.

#### What do you think of when you hear the words brain health?

Sudoku

#### What one thing could everyone do to stay brain healthy?

Elaborative rehearsal.

#### How has your career in medicine created value in your life?

Relationships with patients, trainees and colleagues have made me richer and the problem-solving and conflict resolution skills needed to be successful in medicine are very applicable outside the hospital as well.

#### What advice would you give to someone aspiring to be successful?

I think everyone aspires to be successful under their own terms. My advice would simply be to never assume you know what will happen next, which in essence means be prepared for anything!

Was there a defining moment that lead you to choose the neurosciences as your career, and why?

Seeing a patient in first year medical school with Alice in Wonderland syndrome and the fact that neurology and brain function is interesting enough to be featured in art and literature.

What do you do when you have down time? Mountain bike.

What do you think of when you hear the words brain health? Yes, please.

What is your favorite book and why?

The Count of Monte Cristo.

Which technology could you do without?

Aleksandra Mineyko **Clinical Assistant Professor** University of Calgary

#### What one thing could everyone do to stay brain healthy?

It's probably different for everyone. Thinking about what it means for each individual is a good start.

#### How has your career in medicine created value in your life?

The privilege of interacting with patients and families that face struggles with courage and grace reminds me to be mindful of what I have.



CHOOSE PrBANZEL® (rufinamide)

For the adjunctive treatment of seizures associated with Lennox-Gastaut syndrome (LGS)

BANZEL® delivered a significant reduction in tonic-atonic seizures (drop attacks)\*



Reduction with BANZEL® + 1-3 AEDs (n=73) vs 1.4% increase with placebo + 1-3 AEDs (n=60) (p<0.0001)

Adapted from the BANZEL\* Product Monograph. A double-blind, multicentre, randomized, placebo-controlled, parallel group trial evaluated the efficacy and tolerability of BANZEL\* (rufinamide) adjunctive therapy for the treatment of seizures associated with LGS. Male and female patients (4-37 years of age) were included if they had a diagnosis of inadequately controlled seizures with 1-3 concomitant AEDs. Primary efficacy endpoints were median percent change in total seizure frequency per 28 days, median percent change in tonic-atonic (drop attack) seizure frequency per 28 days, and seizure severity based on a global evaluation of the patient's condition.

\* Because it is difficult for caregivers to precisely separate tonic and atonic seizures, these seizure types are classified as tonic-atonic seizures.

AEDs: Anti-epileptic drugs.

Make BANZEL® a part of your treatment plan for seizures associated with LGS.

#### Indication and clinical use:

- BANZEL® is indicated for adjunctive treatment of seizures associated with Lennox Gastaut syndrome (LGS) in children 4 years and older and adults, and not indicated for the treatment of any other type of seizure disorder.
- There is limited information in subjects >65 years of age.
- The safety and efficacy of BANZEL® in children under 4 years of age with LGS have not been studied and it is not indicated for use in this patient population.

#### Contraindications:

Patients with Familial Short QT syndrome; family history of short QT syndrome; presence or history of short QT interval.

#### Warnings and precautions:

- Cardiovascular: QT interval shortening. Caution should be used when administering BANZEL® with other drugs or products that may shorten the QT interval (e.g., digoxin, mexiletine, phenytoin, magnesium sulfate).
- BANZEL® contains lactose and should not be used in patients with galactose intolerance, Lapp lactase deficiency or glucose-galactose malabsorption.

- Neurologic: Dizziness and ataxia; somnolence and fatigue; considerations when
  withdrawing BANZEL® or concomitant AEDs; risk of status epilepticus. Patients
  should be advised about the potential for somnolence or dizziness and advised
  not to drive or operate machinery until they have gained sufficient experience
  on BANZEL® to gauge whether it affects their mental and/or motor performance.
- Ophthalmologic effects: Diplopia, dry eye, eye infection, eye irritation, eye pruritus, blurred vision.
- Suicidal behaviour and ideation. All patients treated with antiepileptic drugs should be monitored for signs of suicidal ideation and behaviour, and appropriate treatment should be considered.
- Multi-organ hypersensitivity reactions. If an AED hypersensitivity reaction is suspected, BANZEL® should be discontinued and alternative treatment started.
- Use in special populations: Women of childbearing potential, pregnant or nursing women, children under 4 years of age, patients over 65 years of age.

#### For more information:

Please consult the Product Monograph at http://eisai.ca/pdf/new/Banzel%20 PM-EN-19Dec2014-MARKETED.pdf for further important information relating to adverse reactions, drug interactions and dosing information that have not been discussed in this piece. The Product Monograph is also available by calling Eisai at 1-877-873-4724.



Reference: 1. BANZEL® Product Monograph. Eisai Limited.

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## **Industry Updates**

The CNSF's Industry Updates section of our website, formerly known as the Virtual Exhibit Hall (VEH), is where we showcase the

CNSF's supporters.

Industry updates highlights the products and services offered by our supporters and their contributions to the Canadian Neurological Community.

Please take time to visit: www.iu.cnsfederation.org

#### **Neuro Careers**

www.cnsfederation.org/careers

Looking for a new career opportunity? Looking to advertise a position at your center?

You should check out Neuro Careers!

Neuro Careers is a classified advertising resource on the CNSF website and linked on the CJNS page in Cambridge Journals Online. Direct ad links are also included in the CNSF members' newsletter, the Neuro | News.

Classified ads are posted online for 2 months, for less than \$500. They open as a full page PDF complete with color, graphics and company logos.

Neuro Careers is a great way to advertise job opportunities and Fellowships to Neurologists, Neurosurgeons, Pediatric Neurologists, Neurophysiologists and related health care professionals.

To find out more, contact Donna at 403-229-9544 or donna-irvin@cnsfederation.org.

## Clinical Practice Guidelines (CPGs)

In June, 2010, the CNSF Board of Directors created a Practice Guidelines (PG) Committee to develop recommendations on how to handle requests to endorse best-practice guidelines. On November 02, 2010, the PG Committee affirmed that the endorsement of Clinical Practice Guidelines is an appropriate role for the CNSF and considered a set of criteria and processes that had been drafted based on the principles and policies developed by the Canadian Stroke Network for its "Stroke Strategy".

The Practice Guidelines Committee concluded that under present circumstances, the most feasible role for the CNSF and its constituent Societies will be to encourage and support the development of best-practice guidelines by other groups such the Affiliate Societies and, if requested, to consider the endorsement of these guidelines, recognizing that:

- Clinical Practice Guidelines are being increasingly used by policy-makers, accreditation bodies, and governments as well as clinicians,
- The processes for developing best-practice guidelines have evolved from being consensus documents prepared by "experts" to guidelines based on evidence-based analyses and qualitative grading techniques, and
- Endorsement of practice guidelines by the CNSF and/or the constituent Societies will require a process that takes into account these contemporary standards for guidelines development and implementation.



Novartis Pharmaceuticals Canada Inc. is one of the country's leading healthcare companies committed to improving the health of Canadians.

We strive to discover and develop medicines that make a real difference.

There can be no delay.

Patients are waiting.



## CNSS's Lifetime Achievement Award



This award is given to a senior (including retired) individual who has made an outstanding, notable or special contribution to neurosurgical teaching, practice or science.

2016's recipient is Dr. Renn Holness, MBBS, BSc, FRCSC.

Renn was born in Jamaica and attended Blake Preparatory School and Jamaica College, where he was a competitive athlete and won the 100, 200 and 440 yard sprints in 1960 and 1961. He went on to study medicine at the University of the West Indies, he then studied at Guy's Hospital in England, earning a BSc in Anatomy before returning to UWI to complete his Bachelor of Medicine, Bachelor of Surgery (MBBS) in 1968.

#### **RENN HAS RECEIVED NUMEROUS HONOURS** OVER THE YEARS INCLUDING:

**2010:** Honourary degree in medicine (DSc) from UWI

**2010:** Recognition from Caribbean College of Surgeons for contributions to Caribbean Neurosurgery

2006: Who's Who in Black Canada 2

**2006:** Pelican Award for a UWI graduate who has contributed significantly to the development of the University or has made an outstanding contribution to

2005: Dr. John Savage Memorial Award for International Health at Dalhousie University

2005: Key Note Address, UWI Medical **Alumni Association** 

**2004:** Caribbean Health Research Council Award of Excellence

**2003:** Guest of Honour, 1<sup>st</sup> Caribbean **Neurosciences Symposium** 

**2000:** Queen Elizabeth II Health Sciences Centre Distinguished Service Award

1998: UWI 50th Anniversary Alumni **Achievement Award** 

1996: UWI Distinguished Graduate Award

He performed an internship at Port-of-Spain General Hospital in Trinidad from 1968-1969 before completing a residency in General Surgery at University of Michigan in 1972. He moved on to Neurosurgical training at Dalhousie University in Halifax and University of Toronto, successfully completing RCPSC examinations in 1976. He joined the staff at Dalhousie in 1977, initially as a Lecturer.

Then he served as Program Director for the Residency Program from 1983 - 1990 and by 1987 had become Professor and Head of the Division of Neurosurgery, a position which he held until 2000. Thereafter, he served as the Director of Undergraduate Surgical Education in the Department of Surgery until 2006.

Clinically, he made several groundbreaking contributions. He was a co-author on the original description of the cervical interlaminar clamp in 1984 (a.k.a. "Halifax Clamp"), which was a revolutionary development in posterior cervical spinal stabilization at the time and remained in use for decades. He was also the first neurosurgeon in Canada to perform fetal tissue transplants for Parkinson Disease in 1992. He was a local site Principal Investigator for many international studies. Although competent in all aspects of Neurosurgery, Renn excelled in cerebrovascular surgery, pituitary surgery and skull base surgery. As in many aspects of life, Renn was an early adopter of endovascular therapy for cerebral aneurysms and presented a CCNS Abstract on the "paradigm shift" in aneurysm treatment in 2001, at a time when most international experts were still skeptical of the efficacy of the new technique.

Renn was an active member of the Canadian Neurosurgical Society,



serving as a Council Member (1985 -1988); Secretary-Treasurer from 1990-1993; President-Elect in 1993-1994 and then as President for a one-year term in 1994-1995.

He was an Examiner for the RCPSC Examination in Neurosurgery from 1986 -1991 and later became Chief Examiner for the RCPSC Examinations in Neurosurgery from 1997 – 2000. He also served as an External Reviewer for the RCPSC on many several occasions.

Throughout his career in Halifax, Renn remained active in international medicine. He delivered decommissioned but serviceable surgical equipment from Canada to Jamaica, while at the same time arranging for Jamaican trainees to come to Canada for electives and longer periods of training, often at personal expense. He also coordinated treatments for Jamaican patients in Canada and the United States, again using personal resources. He used sabbatical time in 1993 and 2000 to return to UWI to teach in Barbados and Nassau.

In 2009, he retired from clinical practice at Dalhousie University and returned to Jamaica, working for the last 7 years to develop a new neurosurgical program in Montego Bay. He has done this with limited institutional resources, few colleagues around for support, but endless perseverance and passion. He remains active in teaching medical students and residents at the University of the West Indies.



## **Advocacy Report**

The 2016 Advocacy Report builds on the recent Bray, Huggett Canadian Journal of Neurological Sciences publication cited here;

Volume 43 / Issue 01 January 2016, pp 5-14

Neurological Diseases, Disorders and Injuries in Canada:
Highlights of a National Study

Garth M. Bray<sup>a1</sup>, and Deanna L. Huggett<sup>a2</sup>

<sup>a1</sup> Departments of Medicine and of Neurology & Neurosurgery,
 McGill University, Montreal, Quebec, Canada
 <sup>a2</sup> Neurological Health Charities Canada, Toronto, Ontario, Canada.

#### **ABSTRACT**

The National Population Health Study of Neurological Conditions, a partnership between Neurological Health Charities Canada and the Government of Canada, was the largest study of neurological diseases, disorders, and injuries ever conducted in Canada. Undertaken between 2009 and 2013, the expansive program of research addressed the epidemiology, impacts, health services, and risk factors of 18 neurological conditions and estimated the health outcomes and costs of these conditions in Canada through 2031. This review summarizes highlights from the component projects of the study as presented in the synthesis report, Mapping Connections: An Understanding of Neurological Conditions in Canada. The key findings included new prevalence and incidence estimates, documentation of the diverse and often debilitating effects of neurological conditions, and identification of the utilization, economic costs, and current limitations of related health services. The study findings will support health charities, governments, and other stakeholders to reduce the impact of neurological conditions in Canada.

NHCC is now uniquely positioned to use these research findings to inform a participatory action research agenda for collective impact consistent with the recommendations of the 2015 Unleashing Innovation Report to which the Chair of the Advocacy Committee provided input.

The timing of these directions is propitious given the results of the 2015 Federal Election. We are bearing witness to a PMO that, through K. Telford and J. Butts, the latter long associated with Prime Minister Trudeau, is very much data driven with respect to ushering in what can only be referred to as a disruptive agenda focused on consumer needs, as highlighted in the Bray Huggett publication.

At the 2016 Academic Health Sciences Network Annual Symposium held 25 February in Ottawa, attended by the Chair of the Advocacy Committee, there was consensus that this government will direct itself to a broad data driven inclusivity agenda. Indeed, the Chair of the Advocacy Committee in a role that extends NHCC directions as a member of Every Canadian Counts Coalition can bear witness to these directions by virtue of two ECCC informed advocacy meetings as of the date of this report, one with the Parliamentary Secretary to the Prime Minister, and the second with the Minister of Sport and Disability.

In parallel with these informed advocacy directions, NHCC member groups including Brain Injury Canada, March of Dimes Canada, and Ontario Neurotrauma Foundation are directing themselves to the participatory action research agenda for collective impact referred to above. The feasibility of these directions has been validated by ONF's Spinal Cord Injury Knowledge Mobilization Network, a pan-Canadian initiative for patient needs-driven care standardization on seven rehabilitation sites in five provinces accounting for 80% of the SCI demographic. Testimony to its Collective Impact directions all participating sites have achieved 90% threshold Required Organization Practices for pressure ulcer assessment as determined by Accreditation Canada.



Garth M. Bray receiving the 2015 CNSF Distinguished Service Award

## **Advocacy Report**



As noted above, SCI KMN represents a pan-Canadian exemplar for transformative clinical impacts for persons with lived experiences and for society. It synergizes the necessary and sufficient evidence-based Health and Social Sciences methods of Intervention, Narrative, and Cause Contribution Analysis using standardized measures of Cause, Change, Performance, and Impact with the potential for scaling to facilitate and coordinate emerging Canadian expertise to build capacity for patient engagement and empowerment. This will be accomplished through creation of a national applied methods hub for neurological conditions. Hub oversight of Collective Impact directions are focused as follows:

- 1. Build Culture of Continuous Improvement
- 2. Eliminate Disparities
- 3. Leverage Existing Assets and
- 4. Engage Local Expertise and Community Voice

In the interests of an inclusivity agenda, more narrowly described as 'patient hood', to build capacity for chronicity comanagement for better illness experience, healthcare utilization, and healthcare outcomes, it is imperative that academia, federal and provincial health research funders, charities, and above all patients and caregivers who are fulsomely engaged and empowered come together to integrate Unleashing Innovation **Themes** 

- 1 Patient Engagement and Empowerment and
- 2 Health System Integration and Workforce Modernization

To these ends, and modelled on the Australian National Disability Insurance Scheme and its formative Disability Investment Group report, MODC, NHCC member groups and ECCC are directing themselves to development of a National Inclusivity Research Institute – a centre of excellence to lead and promote inclusivity research and its application in Canada.

All of the above-noted directions will require priority attention directed to capacity building through training modernization as referred to above, a refrain also being promoted in Canada by the Clinical Investigator Trainee Association of Canada (CITAC) as noted by our University of Alberta colleague Jack Jhamandas, VP Research, AFMC at the recent Academic Health Sciences Network 2016 symposium.

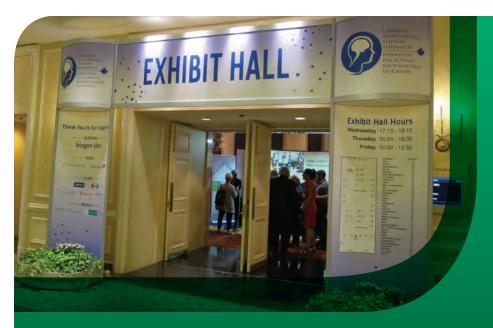
To these ends, the CIHR Institute of Health Services and Policy Research has launched the Canadian Health Services and Policy Research Alliance. The Chair of the Advocacy Committee is a member of the Training Modernization Working Group which will convene an invitational workshop 31 March 2016 to review Working Group recommendations aligned to a pan-Canadian vision and strategy for health services and policy research and to plan future directions.

CHAIR:

Richard Riopelle

**COMMITTEE MEMBER:** 

Michael Hill



**Exhibitor's Reception** 

## Don't forget...

#### Wednesday, June 22<sup>nd</sup> 5:15pm to 7:15pm **Exhibit Hall**

Join your colleagues in the Exhibit Hall for a welcome reception for our supporters and exhibitors on Wednesday at 5:15pm. This is an excellent opportunity to network with colleagues while checking out the latest development regarding medical devices, pharmaceuticals and new opportunities and achievements within the neuroscience field. Visit the exhibitors often, and as many as you can, throughout the week to thank them for their support of the CNSF.



abbvie Booth 304 Codman Neuro Booth 100

#### Exhibitor

Abbvie is a global, research-based biopharmaceutical company formed in 2013 following separation from Abbott Laboratories. The company's mission is to use its expertise, dedicated people and unique approach to innovation to develop and market advanced therapies that address some of the world's most complex and serious diseases. AbbVie employs approximately 26,000 people worldwide and markets medicines in more than 170 countries. For further information on the company and its people, portfolio and commitments, please visit www.abbvie.ca. Follow @abbvie on Twitter or view careers on our Facebook or LinkedIn page.

**Biocodex** Booth 227

#### Exhibitor

BIOCODEX is relying on a global network of scientists and partners, allowing to acquire, over the years, expertise in specific therapeutic areas, such as in orphan disease in children epilepsy, and now enables patients in over 100 countries to have access to its innovative medication. Powered by an industrial vision and innovation, BIOCODEX is committed to provide the best care to patients, emphasizing work on the long term in a constant dialogue with healthcare professionals.

Biogen Idec Booth 107

#### **Gold Sponsor**

Our research efforts are focused on better understanding the underlying biology of diseases so we can discover and deliver innovative treatments that make a real difference in the lives of patients with high unmet medical needs.

Biogen Idec already provides life-changing products such as TECFIDERA", AVONEX", TYSABRI", and FAMPYRA" for patients affected by multiple sclerosis (MS). And, our development pipeline is one of the strongest in the industry. In the coming years, we will be working hard to bring new therapies to market for patients with serious neurodegenerative, non-malignant hematologic and autoimmune diseases.

#### **Cambridge University Press** Booth 218

#### Exhibitor

Cambridge Journals publishes over 340 peer-reviewed academic journals, including journals published on behalf of over 100 learned societies, which form the latest in research and discovery across a range of topics. Many of these journals are the leading academic publications in their fields and together they form one of the most valuable and comprehensive collections of research available today. Across the world, Cambridge Journals are available online and in print - keeping scientists, researchers and scholars abreast of crucial developments in research.

#### **Exhibitor**

Codman Neuro's three divisions offer comprehensive neuroscience solutions:

**NEUROVASCULAR:** Minimally invasive solutions for stroke prevention and management, and the treatment of cerebral arteriovenous malformations.

**NEUROSURGERY:** Surgical devices for the treatment of brain tumors, hydrocephalus, and other neurological disorders requiring surgical intervention, including products to help patients needing critical care.

**NEUROMODULATION**: Making a meaningful difference for patients who suffer from severe spasticity, and the team of healthcare professionals who treat them.

Booth 207 Eisai

#### **Gold Sponsor**

Eisai strives to find and develop new compounds that improve the lives of people in Canada in the areas of neurology and oncology. Our neurology products include: Fycompa, for the adjunctive therapy in the management of partial-onset seizures in adult patients with epilepsy who are not satisfactorily controlled with conventional therapy and Banzel, for the adjunctive treatment of multiple seizure types associated with Lennox Gastaut-Syndrome in children 4 years and older and adults. Our oncology products include Halaven, for the treatment of patients with metastatic breast cancer who have previously received at least two chemotherapeutic regimens, Aloxi, for the prevention of chemotherapy induced nausea and vomiting, and Gliadel Wafer, for the treatment of newly diagnosed glioma and recurrent malignant glioblastoma.

#### Booth 306 **EMD Serono**

#### **Bronze Sponsor**

EMD Serono is a Division of EMD Inc., Canada. EMD Inc., Canada, is an affiliate of Merck KGaA, Darmstadt, Germany. In Canada, EMD Serono provides innovative drug therapies that address unmet medical needs in the areas of neurodegenerative diseases, fertility and endocrinology.



#### Booth 126 GeneDx

#### **Exhibitor**

GeneDx tests for 350-plus rare Mendelian disorders using DNA sequencing and deletion/duplication analysis of the associated gene(s), and offers oligonucleotide microarray-based testing and next-generation sequencing based panels for inherited cancers, including gastrointestinal cancers and disorders, inherited cardiac disorders, mitochondrial disorders, and neurodevelopmental disorders. Visit GeneDx.com for additional information and contacts.

Grifols Booth 116

#### Silver Sponsor

Grifols is a global pharmaceutical company that develops and produces plasma-derived therapies and manufactures hospital pharmacy products, intravenous solutions, diagnostic tools and medical devices. As the third largest global producer of plasma therapies, Grifols has a presence in more than 90 countries and is the world leader in plasma collection, with 150 plasma donation centers across the U.S.

#### Health Match BC Booth 317

#### Exhibitor

Health Match BC is a free health professional recruitment service funded by the Government of British Columbia.

#### **IMRIS** Deerfield Imaging Booth 321

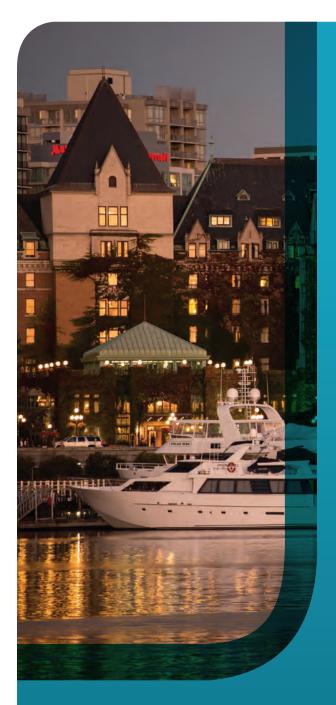
#### Exhibitor

IMRIS, the global leader in intraoperative imaging systems, brings advanced diagnostic quality images and data into the OR. Providing neurosurgeons with greater visualization before, during, and after surgery – without moving the patient. IMRIS Surgical Theatre incorporates MRI, CT and x-ray angiography into multi-purpose surgical suites that travel on-demand into the OR, delivering real-time information to clinicians while preserving optimal surgical positioning, access and techniques.

#### Integra Canada ULC Booth 320

#### Exhibitor

Integra Canada is a leader in Neurosurgical Medical Devices and Neuro Critical Care Monitoring. We are pleased to feature at this year's meeting Integra products such as CUSA, Mayfield, Duragen, CRW Precise Stereotactic Frame, Ruggles instruments, Licox, and Camino. Integra having recently acquired Duraseal Dural Sealant we will be launching Duraseal Exact for Spinal applications. We will also be showing NEW innovative technologies such as the VS3 Visionsense 3D Stereoscopic Camera System and a new range of micro instruments and Sugita T2 Titanium Aneurysm Clips from Mizuho.



**2017 CONGRESS** VICTORIA, BC JUNE 20<sup>TH</sup> TO 23<sup>RD</sup>



A NEW AED FOR YOUR PATIENTS WITH PARTIAL-ONSET SEIZURES

# Dosing Within the Therapeutic Range from Day 1

• The recommended starting dose of BRIVLERA™ is 100 mg/day, with a therapeutic dose range of 50-200 mg/day. The starting dose <u>can be initiated without titration</u>.

The recommended starting dose is 50 mg twice daily (100 mg per day). Based on individual patient response and tolerability, the dose may be adjusted between 25 mg twice daily (50 mg per day) and 100 mg twice daily (200 mg per day). Maximum recommended daily dose of BRIVLERA™ is 200 mg, administered in two equal intakes.

- A new molecule from the racetam class\*.
- Multiple bioequivalent formulations (tablets, oral solution<sup>†</sup>, intravenous injection<sup>†</sup>).

  BRIVLERA™ injection for intravenous use is an alternative when oral administration is temporarily not feasible.

## Consider adding BRIVLERA™ today

- \* Clinical significance has not been established.
- † Market availability of the oral solution and intravenous injection is expected at a later date. AED = Antiepileptic Drug

## Visit us at Booth #117 to learn more!

#### **Indications and Clinical Use**

Adults (≥18 years of age): PrBRIVLERA™

(brivaracetam) is indicated as adjunctive therapy in the management of partial-onset seizures in adult patients with epilepsy who are not satisfactorily controlled with conventional therapy. BRIVLERA™ (brivaracetam) injection for intravenous use is an alternative when oral administration is temporarily not feasible.

Geriatrics (≥65 years of age): The clinical experience with BRIVLERA™ in elderly patients with epilepsy is limited (29 elderly patients aged between 65 and 80 years). No dose adjustment based on age is necessary. In general, dose selection for an elderly patient should be judicious, usually starting at the low end of the dosing range, reflecting the greater frequency of decreased hepatic, renal, or cardiac function, and of concomitant disease or other drug therapy.

Pediatrics (<18 years of age): The safety and efficacy of BRIVLERA™ in pediatric patients (<18 years of age) have not been established and its use in this patient population is not indicated.

#### Contraindications

Patients who are hypersensitive to this drug or to any ingredient in the formulation or component of the container.

#### Most Serious Warnings and Precautions

Hematologic Abnormalities: BRIVLERA™ can cause hematologic abnormalities. In the Phase 3 controlled adjunctive epilepsy studies, a total of 1.8% of BRIVLERA™-treated patients and 1.1% of placebo-treated patients had at least one clinically significant decreased white blood cell count

(<3.0 x  $10^9$ /L), and 0.3% of BRIVLERA<sup>TM</sup>-treated patients and 0% of placebo-treated patients had at least one clinically significant decreased neutrophil count (<1.0 x  $10^9$ /L).

Bronchospasm and Angioedema: BRIVLERA™ can cause hypersensitivity reactions. Rare cases of bronchospasm and angioedema have been reported in patients taking BRIVLERA™. If a patient develops hypersensitivity reactions after treatment with BRIVLERA™, the drug should be discontinued and an alternative considered.

Serious Dermatologic Reactions: Multi-organ hypersensitivity syndrome (also known as Drug Reaction Eosinophilia and Systemic Symptoms or DRESS) is a serious condition sometimes induced by antiepileptic drugs. Typically, although not exclusively, DRESS initially presents with fever and rash, then with other organ system involvement that may or may not include eosinophilia, lymphadenopathy, hepatitis, nephritis, and/or myocarditis. Because DRESS is variable in its expression, other organ system signs and symptoms not noted here may also occur. Organ involvement may be more severe than skin involvement. If any of these hypersensitivity reactions are suspected and an alternative cause cannot be established, BRIVLERA™ should be discontinued and alternative treatment started.

Suicidal Ideation and Behaviour: Suicidal ideation and behaviour have been reported in patients treated with antiepileptic agents in several indications. All patients treated with antiepileptic drugs, irrespective of indication, should be monitored for signs of suicidal ideation and behaviour and appropriate treatment should be

considered. Patients (and caregivers of patients) should be advised to seek medical advice should signs of suicidal ideation or behaviour emerge.

#### Other Relevant Warnings and Precautions

- BRIVLERA™ should be withdrawn gradually because of the risk of increased seizure frequency and status epilepticus
- Somnolence and fatigue
- Dizziness and disturbance in gait and coordination
- Psychotic and non-psychotic behavioural disorders
- Potential reduced exposure to oral contraceptives
   Contraception in women of childbearing potential
- Pregnant women, nursing women, patients going through labour and delivery
- Fertility
- Not indicated for use in pediatric populations (<18 yrs)
- There were insufficient numbers of patients 65 years of age and older in double-blind, placebo-controlled studies (n=29) to adequately assess the safety and efficacy of BRIVLERA™ in this population. No BRIVLERA™ dose adjustment based on age is necessary.
- Patients with renal impairment
- Patients with hepatic impairment

#### For More Information

Please consult the product monograph at <a href="http://webprod5.hc-sc.gc.ca/dpd-bdpp/index-eng.jsp">http://webprod5.hc-sc.gc.ca/dpd-bdpp/index-eng.jsp</a>, or call 1-866-709-8444 to find more important information relating to adverse reactions, drug interactions, and dosing information which have not been discussed in this piece. The product monograph is also available by calling us at 1-866-709-8444.







Invitae Booth 325

#### Exhibitor

Invitae, a genetic information company, is aggregating the world's genetic tests into a single service with better quality, faster turnaround time, and lower price than most singlegene tests today. Our mission is to bring genetic information into mainstream medical practice to improve the quality of healthcare for billions of people.

#### **KEGO Corporation**

Booth 120

#### Exhibitor

KEGO Corporation (formerly King Medical) provides wholesale medical equipment and supplies to the Canadian healthcare industry. At KEGO, we strive to provide our customers with quality products, cost saving advantages, prompt delivery, and the highest level of customer service. We look forward to developing a business relationship with you and your company, an association that you will trust and rely on. We appreciate your business and look forward to fulfilling your future product needs.

#### Leica Microsystems

Booth 315

#### Exhibitor

Leica Microsystems announces the Leica M720 OH5 with Horizontal Optics and Leica M525 OH5 Neurosurgical microscopes, plus the first surgical microscope with built-in 3D HD video recording.

LifeLabs Booth 105

#### Exhibitor

LifeLabs is a Canadian-owned company with over 50 years of experience providing laboratory testing services to help healthcare providers diagnose, treat, monitor and prevent disease in patients. LifeLabs Genetics is the largest privately owned genetics laboratory in Canada, offering more than 2,000 genetic and biochemical tests. In communities across BC and ON, LifeLabs' delivers cost-effective, convenient access to laboratory testing services which are essential for optimal outcomes in healthcare.

#### Medtronic of Canada

Booth 303/307

#### Silver Sponsor

Medtronic develops innovative surgical devices and implant therapies for the treatment of various cranial, spinal and orthopaedic conditions. We strive to bring procedural intelligence and smart instruments to surgery to enable intraoperative precision, visualization, surgical access, navigation and imaging.

#### Mizuho America, Inc.

Booth 219

#### Exhibitor

Mizuho America, Inc. is a cerebrovascular focused instrumentation company whose main products include the Sugita T2 Aneurysm Clips, 7201B Operating Table, Cranial Stabilization Systems, Intracranial & Vascular Dopplers, NSK Surgical Drill System, and Micro Instrumentation including the Kelly Endonasal Set, Lawton Neurovascular Bypass Set and Evans Rotatable Set.Continuous collaboration with the world's leading surgeons and designers, coupled with aggressive R&D and product acquisition strategies, keep Mizuho on technology's leading edge, assuring continuous improvements in both product performance and patients' quality of life.

**Natus** Booth 106

#### Exhibitor

Natus Neurology is a leading provider of healthcare products used forthe detection and monitoring of neurological dysfunction, epilepsy and sleep disorders; neurophysiologic research, and cerebral vascular disorders.

#### NeuroSource Medical

Booth 204

#### Exhibitor

NeuroSource Medical is a Canadian-owned neurodiagnostic distribution company established by a group of professional physiologists and technologists who have a combined 70+ years of experience and a working knowledge of every product they sell. NeuroSource Medical has established relationships with many of the leading MD, PhD and technologists from across the country affording its customers expert opinions and product feedback to ensure complete satisfaction with every product delivered. This clinical and technical knowledge coupled with NeuroSource Medical's experience provides a service previously unavailable and unmatched by others within the industry.

#### **Novartis** Booth 217

#### Silver Sponsor

Novartis Pharmaceuticals Canada Inc., a leader in the healthcare field, is committed to the discovery, development and marketing of innovative products to improve the wellbeing of all Canadians. In 2012, the company invested close to \$100 million in research and development in Canada. Novartis Pharmaceuticals Canada Inc. employs more than 600 people in Canada.



Roche Booth 221 Stryker Booth 122

#### **Bronze Sponsor**

From our approach to clinical trials for new drug therapies, to industry partnerships and community involvement, Roche Canada is a leader in providing pharmaceutical and diagnostic solutions that make a profound difference in people's lives. Our innovative approach improves the effectiveness and efficiency of the healthcare system in the diagnosis, treatment and management of acute and long-term disease.

Roche Canada employs approximately 1,000 people across the country, with its pharmaceuticals head office located in Mississauga, Ontario and diagnostics division based in Laval. Quebec.

#### Roxon Medi-Tech Ltd.

Booth 104

#### Exhibitor

Founded in 1975, Roxon Medi-tech Ltd. is a 100% Canadian owned corporation dedicated to supplying the quality specialized equipment to medical facilities across Canada. Our focus is in Neurology, Cardiac and Respiratory equipment.

#### Sanofi Genzyme

Booth 216/313

#### Silver Sponsor

We have long been known for our expertise in rare diseases, including the class of genetic disorders known as lysosomal storage disorders (LSDs). We have also built a franchise in multiple sclerosis that aims to address the unmet needs of this patient community.

At Sanofi Genzyme Canada, one area of significant unmet medical need where our experts have focused their attention is Multiple Sclerosis (MS). Finding effective treatments for a complex disease like multiple sclerosis is no easy task, but our MS research is spearheaded by top experts employing some of the most advanced and creative scientific problem-solving skills in the industry.

Sanofi Genzyme Canada is pleased to offer LemtradaR, a unique therapy with a novel dosing regimen. Lemtrada further complements Genzyme's current oral therapy, AubagioR (teriflunomide), a once-a-day oral therapy, both approved by Health Canada for the treatment of Relapse-Remitting Multiple Sclerosis.

#### **Exhibitor**

Together with our customers, Stryker is driven to make healthcare better. We are collaborating more than ever across our Neurotechnology and Spine businesses to develop solutions for a range of customers. From being an innovation leader in implants and navigation systems to providing Complete Stroke Care, we help solve critical needs in healthcare and are committed to growing our Neurotechnology offering. We are focused on education and training to support innovation and we surround our customers with the programs and resources they need to serve their patients more effectively. Stryker's six business units addressing the needs of the Neurotechnology and Spine market include: Craniomaxillofacial, Interventional Spine (IVS), Navigation, Neurovascular, Neuro Powered Instruments (NSE) and Spine.

#### Sunovion Pharmaceuticals

Booth 220

#### **Bronze Sponsor**

Sunovion Pharmaceuticals Canada Inc., a subsidiary of the U.S. based Sunovion Pharmaceuticals Inc. is headquartered in Mississauga, Ontario. Sunovion Pharmaceuticals Inc., an indirect, wholly-owned subsidiary of Dainippon Sumitomo Pharma Co., Ltd. We Believe that:

Our patients come first.

It isn't innovative if it doesn't get results.

No one approach has all the answers.

Wellness promotes well-being.

Healthy bodies and minds free people enabling them to turn outward and reconnect with family, friends, and the wider world. That's the principle that drives all we do at Sunovion Canada.

#### Synaptive Medical

Booth 121

#### Exhibitor

Synaptive is a medical device company based in Toronto, Canada, driven to develop innovative neurosurgical tools that provide a seamless surgical solution from pre-operative planning to post-operative care. Our BrightMatter™ Solutions support neurosurgical procedures through advanced algorithms, robotics, and optical technologies designed to improve efficiencies while focusing on clinical outcomes.

#### **CONTINUING PROFESSIONAL DEVELOPMENT**

The Canadian Neurological Society and the Canadian Neurosurgical Society, member societies of the CNSF, are accredited providers of the Royal College's Maintenance of Certification (MOC) program. The CNSF is committed to providing relevant Continuing Professional Development (CPD) opportunities to its members and to neurologists and neurosurgeons, in general.

We thank the Professional Development (PD) and Scientific Program (SP) Committees for their time, effort and energy in working collaboratively to develop the 2016 CNSF Congress.



# An investment in research is an investment in hope.

Roche is a leader in the research and development of pharmaceutical and diagnostic solutions that look beyond today's horizons and make a profound difference in people's lives.

Working in partnership with healthcare practitioners from across the country, we have opened the door to countless new possibilities in the discovery, treatment and management of acute and long-term disease.

Doing now what patients need next





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#### Teva Canada Innovation

#### Booth 127

#### **Bronze Sponsor**

Teva Canada Innovation is the Canadian innovative division of Teva Pharmaceutical Industries Limited, a family of companies with a global footprint, a 100+ year history and a shared obligation to improve patient health. Over the years, we have become a leader in the treatment of relapsing-remitting multiple sclerosis in the country and around the globe. We have expended our neurological expertise with the arrival of products used to treat Parkinson's disease and migraine and we are now developing our portfolio with oncology and women's health products. In our pursuit to improve the health of Canadians, we intend to continue to put the patient at the heart of everything we do, and to work hand in hand with them, their families and their physicians. Our mission is to innovate, assist and reassure - one patient at a time!

#### Valeo Pharma Inc.

#### Booth 323

#### Exhibitor

Valeo Pharma concentrates on the commercialization of specialized innovative products addressing the needs of patients suffering from complicated and/or rare diseases.

We identify opportunities to provide healthcare professionals and patients with therapeutic solutions which allows us to bringing high quality, novel therapeutic solutions to Canadian Healthcare professionals and patients to improve quality of life.

We offer Synacthen" depot for a number of indicated neurological conditions such as acute exacerbation of multiple sclerosis (MS relapse), nephrotic syndrome and optic neuritis.

#### **UBC** Canada Inc

Booth 117

Platinum Sponsor

At UCB Canada Inc. we aspire to be the Patient-Centric global biopharmaceutical leader transforming the lives of people with severe diseases.

#### **ZEISS Canada**

Booth 118

#### Exhibitor

ZEISS PENTERO 800 & PENTERO 900- Powerful surgical microscopes for brilliant visualization.

TRENION 3D HD - Our stereoscopic, high-definition video system enables surgeons to effectively share brilliant, 3D images.

INFRARED 800 - Intraoperative visual assessment of blood flow and vessel patency during arteriovenous malformation (AVM), bypass and aneurysm surgery.

FLOW 800 - A unique analysis tool generating blood flow dynamics data by identifying detailed vessel blood flow intraoperatively. Transform video data into visual maps and diagrams to support fast identification of AVM feeding arteries, nidal vessels and draining veins.

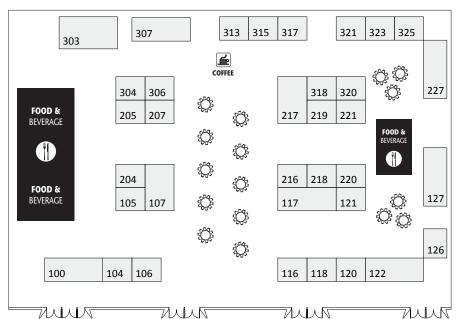
#### **Zimmer Biomet**

Booth 205

#### Exhibitor

Founded in 1927 and headquartered in Warsaw, Indiana, Zimmer designs, develops, manufactures and markets orthopaedic reconstructive, spinal and trauma devices, dental

implants, and related surgical products. Zimmer has operations in more than 25 countries around the world and sells products in more than 100 countries.





The CNSF values the support it has received in 2016 from...

# **OUR MAJOR SUPPORTERS**

The CNSF's relationship with all its supporters and exhibitors is based on honesty, integrity and transparency. The CNSF relies on the support it receives from all industry sectors.

The CNSF receives this support throughout the year; at our Congress, through our Journal and in our other CPD activities. Industry is very generous year after year in their provision of unrestricted and unconditional grants to the CNSF. Thank you!

The CNSF's major supporters are listed below, none of whom have had any input into the CNSF's CPD programs, the Congress, nor the Journal. Most importantly, our Congress courses, programs and speakers are selected independently by our SPC/PDC Committee and the CNSF Board.

Platinum



**BIOGEN IDEC** which includes a Lunch 'n Learn on Multiple Sclerosis Practice Audits, the purchase of 2 Exhibit booths and the advertising in Neuro | News.

**EISAI** which includes a Lunch and Learn on Epilepsy, the support of the Resident Review Course on EEG and the Epilepsy Course, the purchase of an Exhibit booth, the supply of the delegate gift and advertising in Neuro | News.

**UCB,** which includes the sponsorship of the hotel branded key cards, support of a Lunch n' Learn on Epilepsy, the Epilepsy Video Clinical Case Study, the Exhibitors' Reception, the purchase of an Exhibit booth, Neuro | News advertising and a Fellowship Grant to CSCN for 2016/2017

Gold





Silver









**GRIFOLS,** which includes the support of the Neuromuscular Course and Neuromuscular Clinical Case Study, the purchase of a booth and a Fellowship Grant to CSCN for 2017/2018.

**MEDTRONIC,** which includes the support of the Resident Review Course on Neurovascular, the Hydrocephalus Course and the purchase of two Exhibit booths and tech suite.

**NOVARTIS,** which includes a Lunch n' Learn on Neuroscience Treatment Paradigms, the purchase of 2 Exhibit booths and advertising in Neuro|News.

**SANOFI GENZYME,** which includes the sponsorship of the Lanyards, support of the Lunch n' Learn on MS and the purchase of 2 Exhibit booths.

**EMD SERONO,** which includes the support of the Multiple Sclerosis Course a booth purchase and support of the Residents' Social.

## **SUNOVION PHARMACEUTICALS CANADA INC.,** which includes the support of the Hot Topics: Psychiatric

which includes the support of the Hot Topics: Psychiatric Comorbidities Course and the purchase of an Exhibit booth.

**ROCHE,** which includes the support of the Course Notes web page, a booth purchase and advertising in Neuro | News.

**TEVA CANADA INNOVATION,** which includes the purchase of 2 Exhibit booths and advertising in Neuro | News.

Bronze









Again, our thanks to all.



Earn up to
5 hours of Section 3
credits and assess
your practice!

#### Dear Colleague,

The CNSF is a proud partner of the Canadian Practice Assessment in MS. By offering this program to neurologists across the country, the CNSF hopes to gather important information about how neurologists are practicing, allowing us to better deliver educational initiatives to our members

I hope you will agree to take part in this important initiative!

Sincerely,

Jeanne Teitelbaum, CNSF President

#### BY TAKING PART IN THIS PROGRAM, YOU WILL:

- Gain a better understanding of your own practice patterns in MS
- 2. Receive a report of your practice in comparison to your peers across the country
- 3. Receive valuable Section 3 credits

This program is an Accredited Self-Assessment Program (Section 3) as defined by the Maintenance of Certification Program of the Royal College of Physicians and Surgeons of Canada, and approved by the CNSF. You may claim a maximum of 5 hours (credits are automatically calculated).

## FOR MORE INFORMATION AND TO REGISTER ONLINE, GO TO:

www.vivomap.ca/CPAMS

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