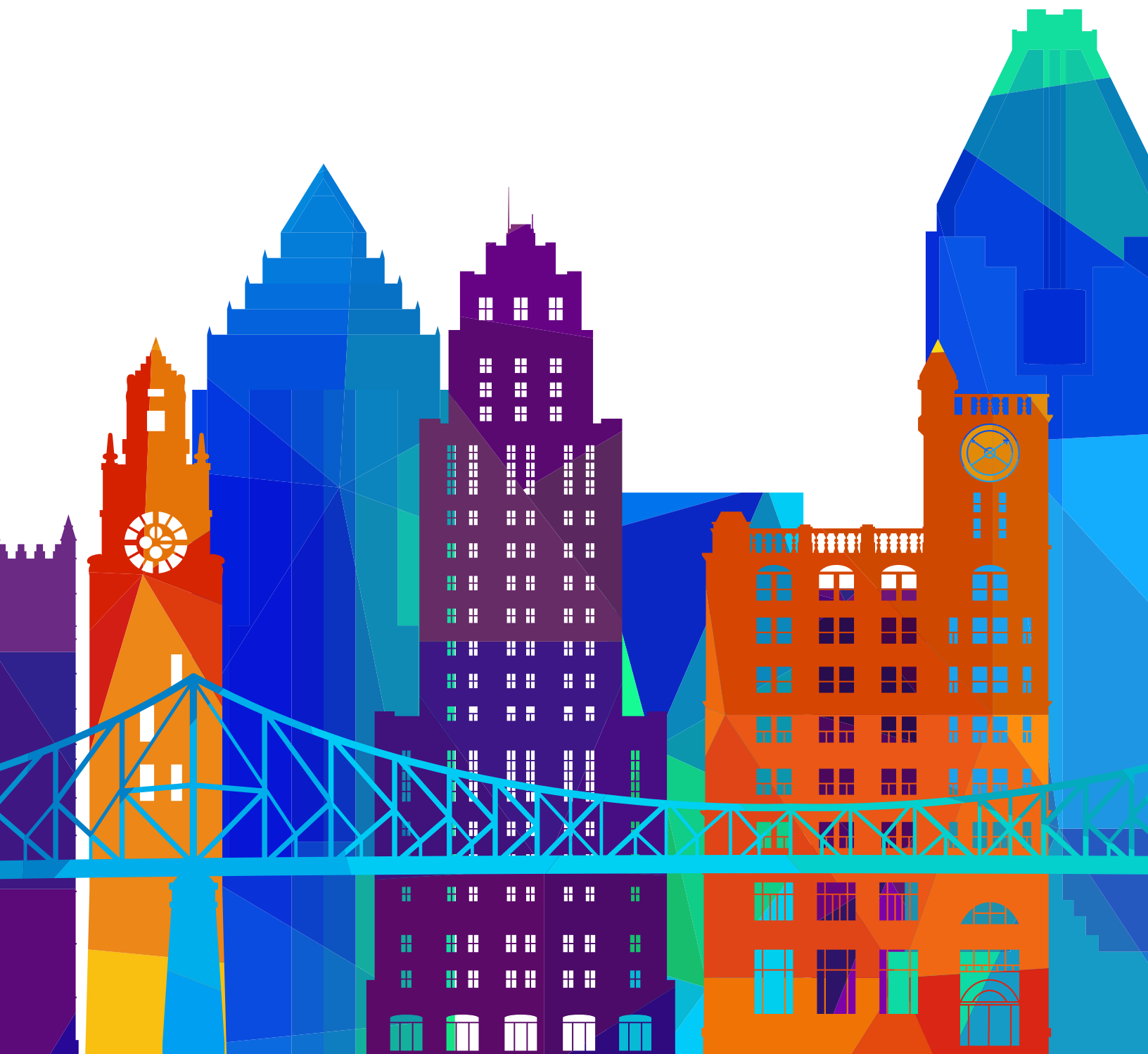


CANADIAN NEUROLOGICAL SCIENCES FEDERATION

NEURO NEWS



ANNUAL EDITION 2019

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2018 / 2019 Society Boards of Directors

Your 2018 / 2019 Board of Directors, by Society, are listed below. Take some time to thank them for their dedication, commitment and efforts on behalf of you and your Society.



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 CNSF CEO Dan Morin



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 Residents' Representative Jr. Matthew Eagles
 CNSF CEO Dan Morin



Canadian Society of Clinical Neurophysiologists / Société canadienne de neurophysiologie clinique

2018 / 2019 CSCN Board of Directors

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 CNSF CEO Dan Morin



2018 / 2019 CSNR Board of Directors

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CNSF Vision, Mission, Values and Priorities

CNSF Vision

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

CNSF Strategic Priorities

To ensure the achievement of its Vision and Mission, the CNSF has three strategic priorities: Continuing Professional Development; Membership Value; and Advocacy. The main objectives of these three priorities are listed in this section. In addition, responsibility for expanding and putting these elements into operation has been assigned to one or more of the CNSF constituent societies, committees, or staff.

1. Continuing Professional Development:

The goal of this priority is to review, refine, improve and expand the overall CNSF CPD plan to meet the evolving needs of Society members while continuing to focus on the CNSF's priorities, i.e. the Congress and the Journal.

2. Membership Value:

The goal is to build a strong organization that provides value to the constituent Societies and their membership.

3. Advocacy:

The goal is to increase awareness of the impact and burden of diseases, disorders and injuries of the nervous system in Canada on affected individuals, their families, and communities, and the health-care system. The targets of this priority are the policy-makers at all levels of government, the general public and affiliated health care providers.

CNSF 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.
- **Membership Services** include services delivered to the five 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.
- **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.



CANADIAN
NEUROLOGICAL
SCIENCES
FEDERATION

FÉDÉRATION
DES SCIENCES
NEUROLOGIQUES
DU CANADA

Message from the CNSF President

Dear CNSF members and delegates

I am delighted to have the honor of trying to summarize the activities of our family of organizations for the last year.

I will start out by thanking all the member societies and their leadership: Drs. Patrick McDonald and Dhany Charest for CNSS, Drs. Fiona Costello and Jodie Burton for CNS, Drs. Cecil Hahn and Simon Levin for CACN, Drs. Fraser Moore and JP Appendino for CSCN and finally Drs. Karel ter Brugge and Donatella Tampieri for CSNR, the latest addition to our family. Canadian Apheresis Society has recently joined the CNSF as an Associate Society. The CNSF has made an overture to Canadian Stroke Consortium for greater collaboration, thanks primarily due to the initiatives by Dr. Michael Hill and our CEO, Dan Morin.

The SPC chair and vice chair (Drs. Alex Henri-Bhargava and Joseph Megyesi), the PDC chair and vice-chair (Dr. Alex Mineyko and Cian O'Kelly) and the co-chairs of the membership committee (Drs. Bev Prieur and Jeanne Teitelbaum) need to be congratulated on a superb job, done well all through the year. The volunteers that reviewed the 163 submitted abstracts deserve our thanks for their tireless work as does the editorial and management team of our Journal under the guidance of the Editor-in-Chief, Dr. Robert Chen. Clinical Practice Guidelines Chair Shobhan Vachhrajani and Advocacy Chair, Rick Riopelle also deserve acclaim.

Please visit our website and peruse the Congress program, which I am sure you will agree promises to be superb. We have pre Congress activities for several of the member Societies and the demand for Lunch 'n Learn sessions had almost surpassed availability. Thanks to all concerned, we have a superb program along with pre-program activities. The Executive Committee after a lot of discussion decided to dispense with a formal social event to allow the members to enjoy the unique city that is Montreal.

The WFN bid for 2023 with strong support by CNS and CNSF is going ahead and appears very promising. Unfortunately, we had to withdraw the bid for the 2023 WFNS meeting for Toronto due to some logistical issues and scheduling conflicts. We plan to collaborate with all parties to put forth a strong bid for 2025.

Dan Morin, CEO and the staff at the CNSF Secretariat deserve much credit for making the organization work as efficiently as it does. Of course, nothing can be done without the active participation of all of you and I thank you for all you do for the CNSF and the member Societies.



If I have omitted something important, please forgive me. Wishing you and your families a great spring and I'm looking forward to seeing you here, at the Congress in Montreal.



Kesh Reddy, CNSF President

*"I'm looking forward to seeing you here,
at the Congress in Montreal."*



Photo: © Hanqian Jiang

Introducing ^{Pr}TegsediTM (inotersen) injection 284 mg/1.5 mL

for your hATTR patients

TEGSEDITM, the first and only subcutaneous treatment indicated for the treatment of stage 1 or stage 2 polyneuropathy in adult patients with hereditary transthyretin amyloidosis (hATTR)^{1,2*}

**NOW
available** 
in Canada!



**Come visit us at the
Akcea Therapeutics Booth
#105 to learn more!**

The selective binding of TEGSEDITM to the TTR mRNA causes the degradation of both mutant and wild type (normal) TTR mRNA. Degradation of TTR mRNA prevents the synthesis of TTR in the liver, resulting in significant reductions in the levels of mutated and wild type TTR protein secreted by the liver into the circulation.^{2†}

Consult the Product Monograph at http://www.akceatx.ca/wp-content/uploads/2018/10/FINAL-Pristine-PM_02OCT2018.pdf for important information about:¹

- Contraindications in patients with hypersensitivity to this drug or to any ingredient in the formulation, including any non-medical ingredient, or composition of the container, platelet count $<100 \times 10^9/L$ before the start of treatment, urine protein to creatinine ratio UPCR ≥ 113 mg/mmol (1 g/g) before the start of treatment, an estimated glomerular filtration rate (eGFR) <45 mL/min/1.73m² before the start of treatment and severe liver impairment before the start of treatment.

- Most serious warnings and precautions regarding thrombocytopenia and glomerulonephritis.
- Other relevant warnings and precautions regarding more injection site reactions in patients with anti-drug antibodies, potential risk of ocular toxicity due to vitamin A deficiency, use in pregnant and nursing women, and use in pediatrics, which is not indicated.
- Conditions of clinical use, adverse reactions, drug interactions and dosing information.

The Product Monograph is also available by calling us at 1-833-327-0723.

* Comparative clinical significance has not been established. † Clinical significance has not been established.

References: 1. Data on File. Akcea Therapeutics Canada Inc. 2. TEGSEDITM. Product Monograph. October 2, 2018.

Message from the CNSF CEO

Neuro|News is intended to detail CNSF activities and how the volunteers comprising the CNSF and Society Boards and the numerous Committees are working hard on the behalf of members to provide the many benefits of joining one, or more, of the five Societies which comprise the Federation.

We are so appreciative of the total dedication, hard work and creativity of our 'volunteers' who dedicate time and effort to contribute to our success. Members of the CNSF owe a debt of gratitude to their fellow members who take on vital roles as Board members, chairs and vice-chairs and committee members and contributors to the Journal at all levels; their names are listed throughout this year's Neuro|News. Why not stop them and say thanks.

The Secretariat, manned so professionally by Donna, Marika and Nicole do wonderful work to keep the administrative aspects of the Societies, the CNSF and Journal on track. They, too, deserve a great deal of thanks.

Welcome to this year's Congress and thank you for attending. The Congress is a culmination of the hard work put in by so many of our Committees and Boards. We appreciate your dedication and attendance and loyalty to our uniquely Canadian Congress. Enjoy!

And, thank you to our many 'industry' supporters. All of them are, collectively, vital to our success. Our sponsors and exhibitors are listed throughout N|N; please take the time to visit them in the exhibit hall and thank them for their support.



Thank you.

Dan Morin
Chief Executive Officer
Canadian Neurological Sciences Federation

2020 CNSF Congress

Experience the Rocky Mountains

Join us in

Banff, Alberta

Sunday, June 7 to
Wednesday, June 10
2020

at the beautiful
Fairmont
Banff Springs
Hotel



Photo: Paul Zizka, Climbing Tunnel Mountain, Banff



Like us on Facebook:
facebook.com/CNSFNeuroLinks



Follow us on Twitter:
twitter.com/CNSFNeuroLinks

LOOK FOR “RED-FLAG” SYMPTOMS

Hereditary ATTR (hATTR) amyloidosis

Hereditary ATTR amyloidosis is an inherited, rapidly progressive disease that causes sensory-motor polyneuropathy that may be accompanied by autonomic or cardiac symptoms, eventually robbing patients of function – and even their lives.¹⁻⁵

With increased research and development in hATTR amyloidosis, it is now more critical than ever to be aware of red-flag symptom clusters.^{1,5}

To learn more about hATTR amyloidosis, visit www.hattramyloidosis.ca

Alnylam is a biopharmaceutical company developing a potential new class of innovative medicines. We have a core focus on therapeutics toward genetically defined targets for the treatment of serious, life-threatening diseases with limited treatment options for patients and their caregivers.

To learn more about Alnylam, please visit www.alnylam.ca.

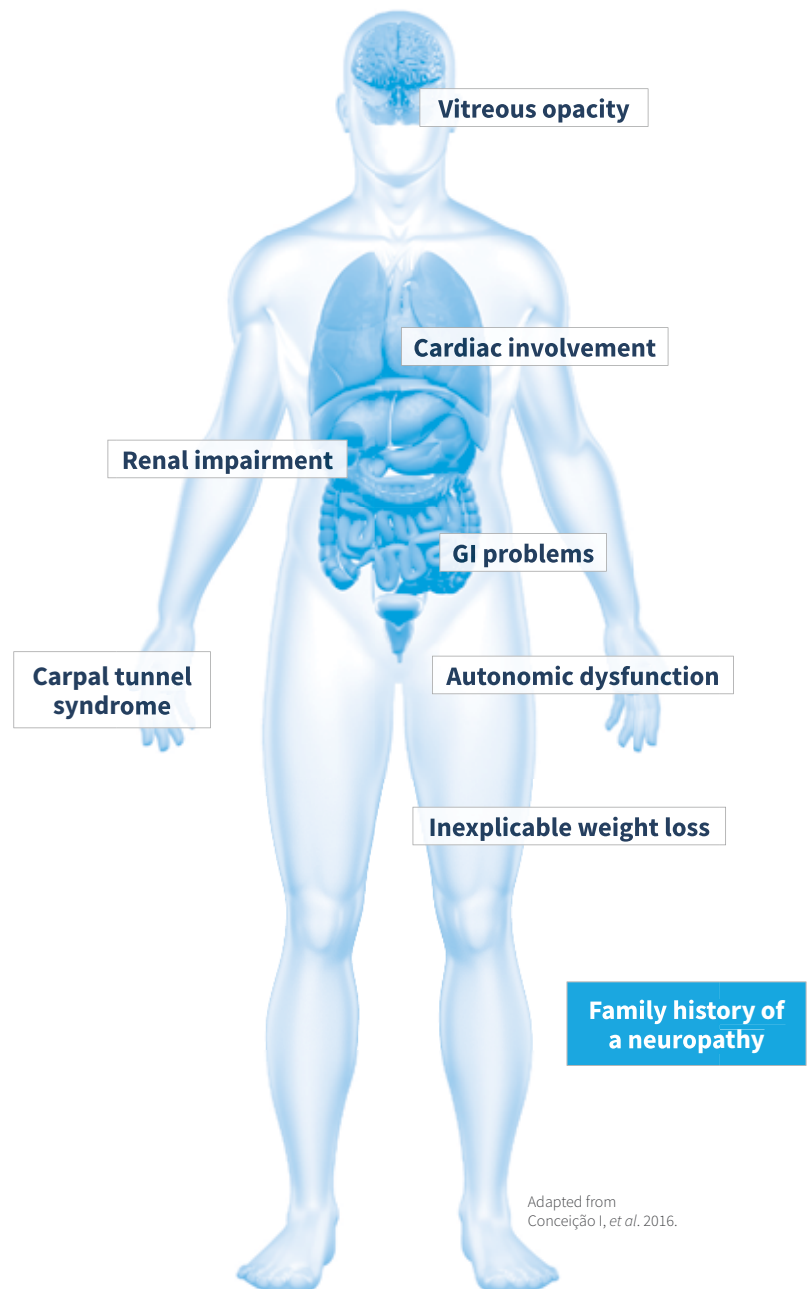
GI=gastrointestinal tract; TTR=transthyretin

References: 1. Conceição I, et al. “Red-flag” symptom clusters in transthyretin familial amyloid polyneuropathy. *J Peripher Nerv Syst* 2016;21:5-9. 2. Hanna M. Novel drugs targeting transthyretin amyloidosis. *Curr Heart Fail Rep* 2014;11:50-57. 3. Adams D, et al. Rapid progression of familial amyloidotic polyneuropathy: a multinational natural history study. *Neurology* 2015;85:675-82. 4. Damy T et al. Cardiac findings and events observed in an open-label clinical trial of tafamidis in patients with non-Val30Met and non-Val122Ile hereditary transthyretin amyloidosis. *J Cardiovasc Transl Res* 2015;8(2):117-17. 5. Mohty D, et al. Cardiac amyloidosis: updates in diagnosis and management. *Arch Cardiovasc Dis* 2013;106(10):528-40.



Variable clinical presentation¹

Suspect hATTR amyloidosis if **progressive peripheral sensory-motor polyneuropathy** is observed with one or more of the following:¹



Adapted from
Conceição I, et al. 2016.

The Canadian Neurological Sciences Federation's Distinguished Service Award

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 one or more of the Federation's Societies and/or the CJNS (Journal); either through participation in the CNSF's committees, involvement in the Congress, the performance of administrative duties, or involvement in promoting the CNSF and its member Societies.

2019 recipient

Dr. Jeanne Teitelbaum

Jeanne joined the CNSF in 1987, while still a resident in Montreal. She has regularly attended and participated in the annual CNSF Congress ever since. She has been a member of the CNSF's Neurocritical Care group since 1989, was chair of the Brain Death Guidelines Committee, then President of that same group. This Affiliate Society took on the task of organizing the Neurocritical Care half day for several years, and Jeanne remains involved in the educational endeavour to this day. She has served on the CNSF Scientific Program Committee, the Affiliates Committee, the Continuing Professional Development Committee and the Membership Committee, where she continues to serve as co-chair. She was also Vice President of the CNSF for 3 years and President from 2014 to 2017. She currently also serves on the CJNS Editorial



Board and as an Associate Editor of the Journal. During her time as President, Jeanne remained very involved in the organization of the Congress, and continued to have input in the scientific content, chairing and presenting at sessions each year, and has volunteered as an Auditor and Poster Moderator at the Congress.

Outside of the CNSF, Jeanne is the Program Director of the Neurocritical Care Program at the Montreal Neurological Institute and is actively involved in education of residents and Fellows at McGill University. She is responsible, along with Dr Donatella Tampieri and Rosa Sourial for the founding of the multi-disciplinary neurovascular stroke program set up at the Neuro. This program gained national recognition as well as an award from Quebec for best multi-disciplinary unit in 2017. She is also an active participant in the establishment and dissemination of guidelines for the neurological determination of death and the donation of organs after cardiac death.

Jeanne, on the behalf of the CNSF Executive and Board, CNSF Members and the Secretariat thank you for your dedication to the CNSF in the past, the present and hopefully for years to come.

2019 CNSS Lifetime Achievement Award



2019 recipient Dr. André Olivier

Dr André Olivier is being awarded the 2019 CNSS Lifetime Achievement Award — Drake Medal, for his lifetime of service to the Canadian Neurosurgical community. His distinguished career has spanned more than 4 decades, on staff at the MNI since 1971 and leading the department of Neurosurgery at McGill for 20 years.

He is a strong administrator and an inspired teacher. His colleagues, former fellows, and the residents who have trained with him continue to benefit enormously from his teaching and his wisdom.

Dr Olivier is well known as an innovator - having been instrumental in moving radiosurgery, neuronavigation and more recently robotic neurosurgery techniques into common use.

He has been a champion for the surgical treatment of epilepsy and has greatly contributed to the practice of epilepsy surgery through his extensive and impressive list of publications, and his strong commitment to resident and fellowship training.

His ability to speak French, English, Italian and Spanish has assisted in his contributions to the international community of neurosurgeons.

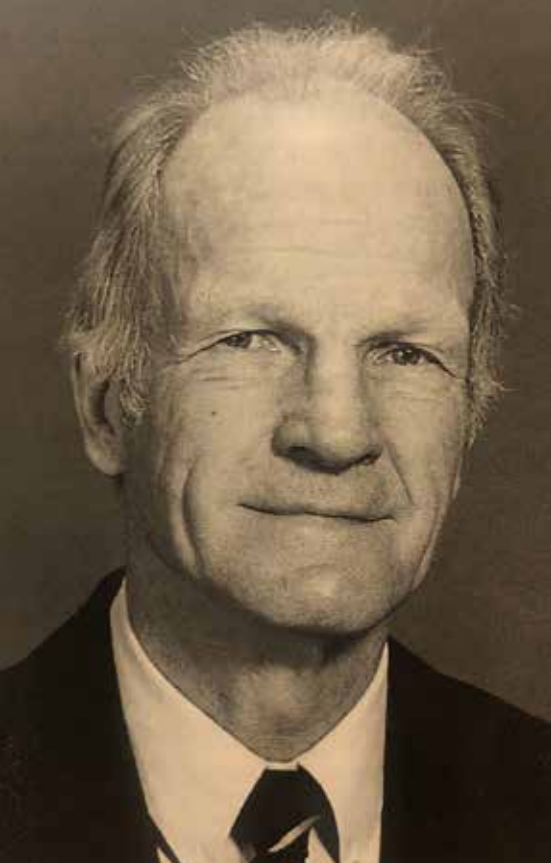
He volunteered on the board of the **Canadian Neurosurgical Society** and even served as our president from 1990 – 1992.

He also served as the President of the CNSF in 1991 and 1992, then known as the Canadian Congress of Neurological Sciences (CCNS).

Dr Olivier has an astounding knowledge of neuroanatomy and has served as an Examiner in Neurosurgery with the Royal College of Physicians & Surgeons of Canada as well as serving as an Examiner of Neurosurgery with the Province of Quebec, Professional Corporation of Physicians & Surgeons.

He is a kind and dedicated physician, and a skilled surgeon, and the CNSS is more than pleased to honor him with the **2019 CNSS Lifetime Achievement Award – Drake Medal**.

***The Charles Drake medal was conceived in 2013 as a memorable enhancement to the luminary Award of the Canadian Neurosurgical Society for Lifetime Achievement. Prior awardees include Dr. R.O. Holness (2016), Dr. M.C. Wallace (2017) and Dr. Falah B. Maroun (2018).*



2019 Henry Dunn — CACN Lifetime Achievement Award

2019 recipient
Dr. Gordon Watters

Gordon Watters is considered one of the first pediatric neurologists in Canada. He attended medical school in Manitoba, which was followed by pediatrics training at Cincinnati Children's Hospital and neurology training at the University of Chicago. He was the first pediatric neurologist on the Prairies working briefly in Winnipeg before joining Charles Barlow at Boston Children's Hospital. In 1969, he joined the Montreal Children's Hospital and McGill University, where he would stay for the remainder of his career. Dr. Watters was Director of the McGill Division of Pediatric Neurology and Program Director of its training program. He achieved the rank of Full Professor before retiring from active practice in 2008.

Dr. Watters was renowned as a master of the neurologic history and physical examination. He possessed an encyclopedic knowledge of the clinical neurosciences that enabled him to zero in on the correct diagnosis no matter how esoteric or rare. With each patient

encounter he had an amazing ability to remember prior patients with similar presentations or similar conditions. Dr. Watters always had at his recall (and fingertips in his ever-expanding filing cabinet), a relevant paper that either confirmed the diagnosis or elaborated upon an aspect of pathogenesis or therapy. His knowledge of pediatric neurology seemed unlimited and he was always striving to do better for his patients. He embodies Osler's description of the great physician: ***The good physician treats the disease; the great physician treats the patient who has the disease.***

Dr. Watters was great a clinician but his true legacy was in the area of education. He was a generous teacher and practiced with extreme humility. He had a distinct ability to draw in medical students to the magic of pediatric neurology. Though demanding, with high expectations of his trainees, he instilled in them a desire to be the best they could be as clinicians, and

for many, as academicians. Through this approach he inspired many to careers that combined research and clinical care. The measure of a man is what he leaves behind. Dr. Watters' neurological progeny provide a vibrant testimony to a lifetime of achievement in his chosen field.

We are proud to honor him this year with the 2019 CACN Henry Dunn – Lifetime Achievement Award.





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In pursuit of the impossible

By taking on seemingly insurmountable obstacles, we give ourselves the opportunity to make a real difference in the lives of people struggling with debilitating disease.



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visit www.mt-pharma-ca.com

CNSF 2019 Society Prize Winners

We are very pleased to announce this years' Society Prize Winners.

Be sure to attend the Grand Plenary Session on Monday, June 17, to hear these presentations alongside our Grand Plenary Distinguished Guest Lecturers

CNS – Francis McNaughton Memorial Prize

Adil Harroud

Childhood obesity and multiple sclerosis susceptibility: a Mendelian randomization study

CNS – Andre Barbeau Memorial Prize

Vincent Picher-Martel

Neuronal expression of Ubiquilin-2 mutant exacerbates TDP-43 aggregation in ALS mouse model

CACN – The President's Prize

Michelle Chiu

Prevalence and determinants of seizure action plans in a pediatric epilepsy population

CSCN – Herbert Jasper Prize

Andrea Parks

Diagnostic yield of Next Generation Sequencing and Myositis autoantibody panels in patients with Axial Myopathy

CNSS – KG McKenzie Memorial Prize Clinical Research

Cameron Elliott

Intraoperative acquisition of diffusion tensor imaging in cranial neurosurgery: readout-segmented DT1 versus standard single-shot DT1

CNSS – KG McKenzie Memorial Prize Basic Research

Candice Poon

Differential microglia and macrophage profiles in human IDH-mutant and-wildtype glioblastoma reveal therapeutic vulnerabilities

Supplementary Society Prize Awards

CNS – Autoimmune Encephalitis

This year, the CNS has been able to provide an additional opportunity for prize submission. In cooperation with the **Anti-NMDA Receptor Encephalitis Foundation**, we were able to select **two prize winners for the best papers on Autoimmune Encephalitis**. These winners will present their work at the 2019 Congress.

Dhruv Jain

Effects of REM sleep in anti-NMDA receptor encephalitis with extreme delta brush pattern

Aravind Ganesh

Worldwide neurologist survey on management of autoimmune encephalitis

CNSS has awarded **two Second Place Prizes** for the following Abstract Prize submissions:

CNSS – KG McKenzie Memorial Prize Clinical Research – 2nd Prize

Ayoub Dakson

A nation-wide prospective multi-centre study of external ventricular drainage accuracy, safety and related complications

CNSS – KG McKenzie Memorial Prize Basic Research – 2nd Prize

Farshad Nassiri

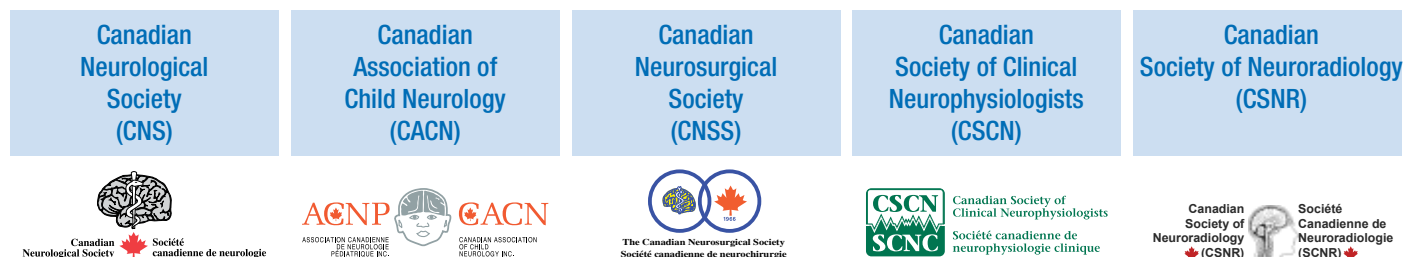
Predicting individualized risk of recurrence: development and validation of a DNA-methylation based nomogram in meningioma

The CNSS 2nd place prize winners present their work at the CNSS Chairs Select Platform presentations on Wednesday morning, June 19.

Benefits of CNSF Membership

Our Member Societies

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



CNSF Membership includes the following benefits:

Membership in the Community of Canadian Clinical Neuroscientists

The community of clinical neurologists, neurosurgeons, pediatric neurologists, neurophysiologists and neuroradiologists 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, Neuroradiologists 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.

Annual Society Prizes

Members have the opportunity to win valuable Society prizes by submitting Abstracts to the Congress and expanded abstracts 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 the Grand Plenary, alongside our Distinguished Guest Lecturers, during the Congress.

There are \$500 second place prizes which may be awarded as well as on-site poster and abstract awards.

Details and submission information is available in the "Call for Abstracts" congress.cnsfederation.org/congress/call-for-abstracts

Canadian Journal of Neurological Sciences

The Canadian Journal of Neurological Sciences is the official publication of our five member Societies. The Journal is an internationally recognized, peer reviewed medical journal, published through Cambridge University Press – Cambridge Core.

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 \$2000 / article for first open access repository upload. CNSF Members pay only \$1000 for this service if requested.

Benefits of CNSF Membership

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, CPD calendar of events, and more.

Residents

First-year residents can apply for complimentary first-year membership, paid by their member Society. Membership dues for subsequent years of residency are 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.

CNSF Society Resident Representatives 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 resident representatives that sits on the CNSF Professional Development and Scientific Program Committees, which determine the scientific program for each year's Congress. The resident representatives attend 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.

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

Would you like to become a member of one of the CNSF Societies? Would you like to take advantage of these Benefits of Membership? 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

The Canadian Neurological Sciences Federation and the Associate and Affiliate Societies

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

- Canadian Association of Neuroscience Nurses
- Canadian Association of Electroneurophysiology Technologists Inc.
- The Association of Electromyography Technologists of Canada
- Canadian Association for Neuroscience
- Canadian Association of Physical Medicine & Rehabilitation
- Canadian Apheresis Group

The CNSF and its Affiliate Societies work collaboratively whenever possible throughout the year. The CNSF values and appreciates these partnerships.

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 Trials and Research Network
- 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

How to diversify with global real estate

These days, it's easy to diversify your investment portfolio, whether you have \$500 or \$5 million to invest.

Diversifying means not putting all your eggs in one basket. When you diversify, it helps to reduce risk, but it doesn't completely eliminate it. Diversifying gives you a "smoother ride," which can help you stay focused on your investment objectives when markets are volatile, rather than tempting you to panic and sell.

For the average investor, it means buying publicly traded securities from multiple asset classes (i.e., equities, fixed income, cash) and different industry sectors and geographical areas.

But diversification starts to get interesting once you've built up some wealth. Then you can move beyond traditional investments into alternative assets like real estate, hedge funds, derivatives, foreign currency and private equity.

These different asset classes provide additional diversification benefits because they have a lower correlation to traditional asset classes, giving you the chance to generate potentially greater long-term returns. How much you allocate to alternative investments depends, of

course, on your individual situation.

Real estate without the responsibilities

Real estate, as an investment, has become increasingly popular thanks to years of rapid price growth. For most Canadians, their real estate investment is in the home they live in. For some others, investing in real estate may involve a vacation property or a condo they're renting out. But the high costs and time involved in managing an income-producing building may be discouraging.

Another way to invest in real estate is to buy fund units or other products that provide exposure to the real estate sector, such as real estate investment trusts, or REITs. Like traditional stocks and bonds, they are publicly traded and widely available.

For investors with significant assets, an area that's opening up is private real estate investments.

Global opportunities in private real estate

Private investments are not listed or traded on public

exchanges. Think Facebook before its initial public offering.

Similarly, private real estate opportunities are not generally available to public investors. They invest directly, or through other funds, in different types of real estate, such as office buildings, residential, commercial and industrial buildings or hotels. The real estate portfolio may include properties in several regions of the world.

Imagine owning part of an office building in Tokyo, a hotel in London or retail space in Australia.

The biggest difference between public and private investments is that the managers of private assets do not have the pressure to satisfy shareholders in the short term. Private managers have more freedom to implement long-term strategies that have the potential to generate better results.

The managers could, for instance, buy a partially unoccupied office building to redevelop it, to bring in more tenants, raise rent or make a profit on its resale—a bit like buying a fixer-upper investment house.

Ideal for patient, knowledgeable investors

The benefits of private real estate are compelling: increased diversification, the potential for higher returns and protection against inflation.

However, private investments aren't subject to the same

rigorous regulatory and reporting rules as public ones regarding the information that must be provided to investors.

Private investments also require a minimum investment that can be substantial and are open to investors only for limited period of time. After this subscription period, they no longer accept new investments.

These investments are generally available only to qualified or "accredited" investors, who have significantly above-average income or significant assets.

Investing in private real estate also requires patience. Private investments have a holding period of seven to 10 years or more to ensure the strategies can be properly implemented.

If you have the money, time and patience, private real estate could be an interesting addition to your portfolio.

The subscription deadline for the MD Platinum™ Global Real Estate Pool is July 15, 2019.

To find out if real estate pools are right for your portfolio, contact your MD Advisor* or call **1 800-267-2332** to set up an appointment with MD today.

md.ca/diversify

MD PLATINUM™

* MD Advisor refers to an MD Management Limited Financial Consultant (Investment Advisor in Quebec) or an MD Private Investment Counsel Portfolio Manager. Discretionary accounts (or investment services) of MD Financial Management Inc. • The Platinum funds described in this document are subject to additional terms and conditions set out in the Platinum funds' operative agreements and regulatory suitability requirements as considered by the MD Private Investment Counsel Portfolio Manager. The Platinum funds' operative agreements will also set out additional information about the investment objective, terms and conditions of such fund, tax information and risk disclosure that are material terms regarding a fund. Any investment in a fund would be speculative and would involve significant risks. The information and strategies presented here are not suitable for U.S. persons (citizens, residents or green card holders) or non-residents of Canada, or for situations involving such individuals. Employees of the MD Group of Companies are not authorized to make any determination of a client's U.S. status or tax filing obligations, whether foreign or domestic. The fund is intended for individuals that are discretionary managed account clients of MD Private Investment Counsel, an operating division of MD Financial Management Inc. • Management fees and expenses associated with investing in MD Platinum private funds may be higher than fees and expenses in public security funds. No guarantee or representation is made that any MD Platinum private investment fund offered will achieve its investment objective. • There are additional risks associated with investing in private investments that are not applicable to typical investments in the public securities markets. These risks include, but are not limited to, the following: private investment funds are speculative and involve a high degree of risk; an investor could lose all or a substantial amount of his or her investment; interests in private equity and private real estate investments are illiquid and there is no secondary market nor is one expected to develop for interests in such investments; there are significant restrictions on transferring private equity and private real estate investments; private equity and private real estate investments experience volatile performance; private equity and private real estate funds are often concentrated and lack diversification and regulatory oversight. Leverage may be employed, which can make investment performance volatile. Real estate investments are sensitive to factors such as changes in real estate values and property taxes, interest rates, cash flow of underlying real estate assets, supply and demand and a manager's skill as well as credit risks and tax and regulatory requirements. • Metropolitan is a registered trademark of Metropolitan Real Estate Equity Management, LLC. © 2018 Metropolitan Real Estate Equity Management, LLC. All Rights Reserved. MD Platinum™ is a trademark of The Bank of Nova Scotia, used under licence. MD Financial Management provides financial products and services, the MD Family of Funds and investment counselling services through the MD Group of Companies. For a detailed list of these companies, visit md.ca. • Certain information contained herein constitutes "forward-looking statements." Due to various risks and uncertainties, actual events or results may differ materially from those reflected or contemplated in such forward-looking statements. As a result, the Recipient should not rely on such forward-looking statements. No representation or warranty is made as to future performance or such forward-looking statements. • The information contained in this document is not intended to offer foreign or domestic taxation, legal, accounting or similar professional advice, nor is it intended to replace the advice of independent tax, accounting or legal professionals. Incorporation guidance is limited to asset allocation and integrating corporate entities into financial plans and wealth strategies. Any tax-related information is applicable to Canadian residents only and is in accordance with current Canadian tax law including judicial and administrative interpretation. The information and strategies presented here may not be suitable for U.S. persons (citizens, residents or green card holders) or non-residents of Canada, or for situations involving such individuals.

Committees

Advocacy Committee

The Advocacy Committee is chaired by Richard Riopelle.

The Neurological Health Charities Canada (NHCC) is made up of organizations that represent specific neurological diseases/disorders from across Canada and attempts to serve as one voice to provide a stronger sense of community and influence for positive change for those persons affected by Neurological Diseases. Much of the CNSF's Advocacy initiatives are in partnership with the NHCC.

In addition, Dr. Riopelle represents the CNSF and other organizations on various initiatives such as: the Canadian Health Services and Policy Research Alliance, Research Canada, the Social Development Partnership Program and several others.

Membership Committee

Membership retention and growth is vital to the continued success and stability of each of the Federation's Societies. As such, each Society has members on the CNSF Membership Committee: Bev Prieur and Jeanne Teitelbaum, Co-Chairs, Sharon Whiting, Ian Fleetwood, Fiona Costello, Jodie Burton, Tejas Sankar, Laila Alshafai, Parichita Choudhury, Ilana Hanes, Adil Harroud, Michael Taccone, Matt Eagles and Djurdja Djordjevic.

Increased Society membership is an objective every Society has expressed as a high priority. Increased membership is reflected in higher revenues for the Societies and the CNSF and ideally for the Congress through increased member registrations. Increased membership makes us stronger and even more relevant.

The issue of expanding membership numbers in every Society has never been as important as it is today.

Don't miss the Moderated Poster Sessions!

Authors with abstracts selected for electronic posters, will have an opportunity to showcase their work to CNSF Congress delegates at multiple large screen viewing stations.

At the Moderated sessions, Authors are given the opportunity to present their concepts, methods and research findings and attendees have the opportunity to ask questions.

May I help you?



Do you have questions regarding your society membership, CNSF services or Congress program and facility information?

Just stop by the Member Services counter for help finding the answers.

Clinical Practice Guidelines Committee

The Clinical Practice Guidelines Committee is chaired by Shobhan Vachrajani with Draga Jichici as Vice Chair. Committee members include: Lyle Weston, Jeanne Teitelbaum and Richard Riopelle.

The goals of the Clinical Practice Guidelines Committee are to:

1. Encourage the development, dissemination and implementation of clinical practice guidelines by our Member and Affiliate Societies, and other Canadian groups that would be of benefit to Canadian neuroscientists.
2. Establish a framework and processes for the promotion and endorsement of clinical practice guidelines so that current evidence-based guidelines meet the needs of, and can be communicated effectively to, the membership of the CNSF.
3. Evaluate and adopt for use by the CNSF membership, with appropriate context-specific provisions, Clinical Practice Guidelines developed outside Canada, particularly in the United States and Europe.





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Canada Inc.

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At Novartis, we harness the innovation power of science to address some of society's most challenging healthcare issues. Our researchers work to push the boundaries of science, broaden our understanding of diseases and develop novel products in areas of great unmet medical need. We are passionate about discovering new ways to improve and extend patients' lives.



The Canadian Journal of Neurological Sciences

The CJNS Journal is owned by the CNSF member societies and features many articles submitted by your colleagues and fellow CNSF members.

Our Editor-in-Chief, Dr Robert Chen, dedicates numerous hours towards the science, the professionalism and the improvements of our Journal publication. He has built a strong Editorial Board and Associate Editors team and we thank them all for their time and dedication.

The Journal is hosted on Cambridge Core, the new academic platform from Cambridge University Press. Cambridge Core is a robust upgrade from the previous Cambridge Journals Online, and was developed specifically with researchers' needs in mind.

CNSF members currently receive full access by logging in as a member on the CNSF website. Cambridge Core is working on our single sign on feature which will allow you to login directly on the Cambridge site using your CNSF member ID# and your last name as username and password.



Dr Robert Chen

The CJNS Journal has been publishing peer reviewed, scientific articles since 1974 and these are all available for viewing online. Check out the multiple features including "Magazine View".

You are invited to learn more about the CJNS Journal and Cambridge Core by visiting the Cambridge booth in the CNSF Exhibit Hall.

Editor-in-Chief: Robert Chen

Associate Editors: Robert Hammond, Tejas Sankar, Jeanne Teitelbaum, Manas Sharma, Mahendranath Moharir, Philippe Huot, Richard Wennberg



Cambridge Core

CJNS Distinguished Reviewer of the Year



Adrian Budhram, MD

2018 recipient: Adrian Budhram, MD

The Canadian Journal of Neurological Sciences sincerely appreciates the consistent and numerous high quality manuscript reviews that **Adrian Budhram** has provided for the CJNS Journal. This award is based on review statistics from the previous year (2018)

Adrian Budhram is a fifth-year neurology resident at Western University in London, Ontario. He has authored over 20 peer-reviewed publications, with his main areas of research interest being neuro-immunology, neuro-infectious diseases and the clinical utility of diagnostic tests. After completion of his residency he will be pursuing an Autoimmune Neurology fellowship at the Mayo Clinic in Rochester, Minnesota, and plans to have an academic practice specializing in the management of neuro-inflammatory diseases.

TIME TO RESPECT MIGRAINE

For too long, migraine has been misunderstood, ignored and stigmatized. It's not just a bad headache. Migraine is a complex neurological disease with crippling effects on peoples' lives.

This is the truth about migraine. A room as the result of pre-held misconceptions and misunderstandings. Truth that for too long has been relegated to a dark.

We need a shift in the way we think about migraine and ensure the disease is properly diagnosed, treated and - importantly - respected.

Lilly strives to change the lives of people with migraine and other disabling headache disorders by providing them with solutions that lead to lives lived more fully.



Alex Henri-Bhargava



Cecil Hahn

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

CECIL: To me, the concept of brain health is relevant at many levels: understanding disease mechanisms at the molecular level, nurturing mindfulness at the personal level, supporting our most vulnerable citizens at the community level, and identifying and modifying risk factors of neurological diseases at the population level.

What is your favorite book and why?

ALEX: A Fine Balance, by Rohinton Mistry. It is very sad, but the characters are so well written. You really get drawn into the story and feel like you know these people as if they had really existed. Despite inflicting a lot of sadness on the reader, I think Mr. Mistry's humanism stands out on every page of the book. The moral is that you are responsible for your own happiness in life regardless of how unfair life may be – which is a difficult lesson to learn.

CECIL: The Good Soldier, a 1915 novel by Ford Madox Ford, for its beautiful impressionist style and its masterful depiction of the complexity of human relationships.

Which technology could you do without?

ALEX: (Anti-)social media. It is nice to be able to stay in touch with people that you would otherwise have completely lost contact with, but on balance it is more of a time suck and negative influence in the world. We see this especially in how it has reduced public discourse.

CECIL: Television.

What one thing could everyone do to stay brain healthy?

ALEX: Meditate.

CECIL: Nurture your relationships with friends and family.

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

ALEX: You learn the most about life when you are able to be with people in their most vulnerable moments. Medicine is the best career for someone who wants to come as close as possible to understanding the human condition. As draining as it can be sometimes, you see patients who are going through extraordinary challenges, and it gives you a lot of perspective.

CECIL: The privilege of caring for children and their families when they are at their most vulnerable and guiding them through their illness journey.

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

ALEX: In order to be successful, you need a clear definition of what “success” looks like to you. I do a lot of teaching and love spending time with medical students and residents. I often discuss career planning, and I make a real effort of trying to learn what is important to that student or to help them come to an understanding of what is important, if they don't already have it. I think you can't be successful unless you know what you want. My fifth-grade teacher Mr. Helm had a poster on our classroom wall that said “If you aim at nothing, you'll hit it.” That stuck with me to this day.

CECIL: Success is personal. Decide how you want to contribute to our world and pursue it. Let your values guide you.

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

ALEX: As a first-year student at McGill I went to the student volunteer fair and there was a booth for the Montreal Neurological Institute. The MNI was on campus and I walked by it every day so I was curious. I was very moved by the stories the patients I met told me, and amazed at how the brain could fail us in such difficult ways, so I kept the idea of going into neurology when I entered medical school. The event that really solidified this choice, however, was sitting in Dr. Brenda Milner's lectures as a medical student. She was an amazing teacher and storyteller and made me see that this extremely complex concept that is human cognition could be understood, a bit at a time.

CECIL: Finishing high school, I had no idea what I wanted to do with my life. I was interested in lots of things: science, history, architecture. Luckily, I was able to attend a small liberal arts university in Massachusetts called Amherst College that had an ‘open curriculum’ which gave me a chance to explore freely. I felt drawn to Neuroscience because it was the most interdisciplinary program of study combining biology, psychology, physics, and biochemistry. I also found a great mentor. The rest is history.

What was the greatest piece of advice you have received?

ALEX: “Don't just do something, stand there.” Thinking about a problem or situation before rushing in is often what is needed, especially in medicine, and especially in neurology.

CECIL: Do what you enjoy and what you're good at. Career success will come.

What do you do when you have down time?

ALEX: I have two children under 5. I don't have a lot of downtime that doesn't revolve around them right now, but we love to go out as a family and enjoy the parks, beaches, and woods around Vancouver Island. I still do like to get a babysitter and get out to a concert or show, too.

CECIL: Trying to keep up with my 4-year-old daughter Freya on her scooter.

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

ALEX: I think it's a bit of a nebulous buzzword actually. So far, everything we know about brain health – managing cardiovascular risk factors, eating well, exercising, seems to be good for general health. I'm interested to see if there really is anything specific to the brain. Meditation is an early contender. The jury is definitely still out on “brain game training.” I think we may one day enter an age of cosmetic neurology as well, where we will be able to boost our brain health pharmacologically, and this will obviously be an ethically challenging area to navigate.

Continuing Professional Development

The CNSF is committed to providing relevant Continuing Professional Development (CPD) opportunities to its members. Providing these CPD opportunities is a specific GOAL of the CNSF as identified in its Strategic Plan.

We thank the Professional Development (PD) and Scientific Program (SP) Committees for their time, effort and energy in working collaboratively to develop the 2019 CNSF Congress Program and other external programs throughout the year.



2019 Congress Planning Committee

The Canadian Neurological Sciences Federation (CNSF) is composed of 5 Societies: Canadian Neurological Society (CNS), Canadian Association of Child Neurology (CACN), Canadian Neurosurgical Society (CNSS), Canadian Society of Clinical Neurophysiologists (CSCN) and the Canadian Society of Neuroradiology.

Members from each of the 5 Societies have representation on our Scientific Program and Professional Development committee(s). They are:

- Aleksandra Mineyko, *CNSF PDC Chair*
- Cian O'Kelly, *CNSF PDC Vice Chair*
- Alexandre Henri-Bhargava, *CNSF SPC Chair*
- Joe Megyesi, *CNSF SPC Vice Chair*
- Athen Macdonald, *CACN PDC*
- Helly Goez, *CACN SPC*
- Michael Esser, *CACN SPC*
- Shannon Venance, *CNS PDC*
- Natalie Parks, *CNS SPC*
- Gerald Pfeffer, *CNS SPC*
- Michelle Mezei, *CSCN PDC*
- Seyed Mirsattari, *CSCN SPC*
- Kristen Ikeda, *CSCN PDC*
- Richard Aviv, *CSNR SPC*
- Tom Marotta, *CSNR SPC*
- David Mikulis, *CSNR PDC*
- Ilana Hanes, *CACN Sr. Resident*
- Djurdja Djordjevic, *CACN Jr. Resident*
- Michael Taccone, *CNSS Sr. Resident*
- Matthew Eagles, *CNSS Jr. Resident*
- Parichita Choudhury, *CNS Resident*
- Adil Harroud, *CNS Resident*
- Kesh Reddy, *CNSF President*
- Sharon Whiting, *CNSF Vice President*
- Tejas Sankar, *CNSF Vice President*
- Dan Morin, *CNSF CEO, SPC, PDC*

Informed by feedback from attendees at the 2016, 2017 and 2018 Congress, the Membership Survey completed in the fall of 2016, and a call for Educational Session Proposals from the membership in 2018, the PDC and SPC were able to develop the program for the 2019 Congress.

Thank you all.

NEURO CAREERS

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

Check out Neuro Careers!

Neuro Careers is an online classified advertising resource on the CNSF website and linked on the CJNS page within Cambridge Core. Direct links to classified ads 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 donna-irvin@cnsfederation.org.

- ▶ www.cnsfederation.org/careers

2019 Congress

Social Highlights

The CNSF Congress is a collegial meeting providing opportunities to reconnect with colleagues from across the country.

Refer to the CNSF Congress App, Online Program or On-Site Signage to confirm times and locations and join in the fun.

- **Resident and Faculty Social**
– Sunday, 7:30 pm
- **Exhibitors Reception**
– Monday, 4:30 pm
- **CACN Dinner, CNSS Dinner & CSNR Dinner** – Monday evening
- **Lunch in the Exhibit Hall**
– noon, Tuesday & Wednesday
- **Wine and Cheese in the Exhibit Hall**
– Tuesday, 4:15 pm



Welcome to Montreal and the 2019 CNSF Congress

We hope that you enjoy your time here and find valuable learning opportunities within our 2019 program.

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Scientific Highlights

We offer an eclectic mix of multidisciplinary courses relevant to all neuroscience specialties as well as society specific days for more focussed sessions.

- **4 full days of accredited sessions.**
- **Diverse program and Courses of interest** for members of all neuroscience specialties.
- **Excellent speakers** including our **special Grand Plenary Speakers:** Donatella Tampieri, David Dodick, Donald Sanders, Adam Kirton, Nalin Gupta.
- **Charcot Lecturer**, Kazuo Fujihara speaking at the Tuesday afternoon session, CNS Day.
- We offer **Lunch 'n Learns** and special **Dinner Sessions** that will feed your body and your mind, and expand on specific topics of interest.



Society Days – Tuesday, June 18:

- **Child Neurology (CACN) Day**
Pediatric Translational Neuroscience
- **Neurophysiology (CSCN) Day**
EEG – Focal Epilepsies and Epileptic Encephalopathies & EMG in Everyday Practice
- **Neurology (CNS) Day**
What's new in Headache & An Update in CNS Demyelinating Diseases (featuring Charcot Lecturer – Kazuo Fujihara)
- **Neuroradiology (CSNR) Day**
Emergency Neuroradiology: Everything you need to know!
- **Neurosurgery (CNSS) Day**
MIS Spine, Surgical Education and Innovative Teaching Methods, Innovation and Technology in Neurosurgery & Multidisciplinary Neurovascular Treatment: Techniques, Programs, and Training Expectations

Hot Topics sessions

for each of our **subspecialties** on Wednesday morning.

Grand Rounds

on Wednesday afternoon completes the program with the presentation of challenging cases offered for group discussion and diagnosis.

2019 Grand Plenary Speakers

Featuring the following special guest lecturers!

Monday June 17 from 8:00 a.m. – 12:00 noon

CSNR Terbrugge Lecture

Hyper-acute Stroke Organization: does one organizational model fit all hospital realities?



Donatella Tampieri, MD., FRCP(C)

In August 2018, Dr. Donatella Tampieri was appointed Professor of Radiology at Queen's University in Kingston, Ontario. She is currently Lead of the section of Neuroradiology at Queen's University and she is implementing a complete Interventional Neuroradiology Program at Kingston Health Sciences Centre.

She held the position of Professor of Radiology, Neurology and Neurosurgery at McGill University for many years and as an Interventional and Diagnostic Neuroradiologist had worked at the Montreal Neurological Institute and Hospital, McGill University from October 1987 till October 2018.

Born in Bologna, Italy, Dr. Tampieri received her high school degree in 1976 and her medical degree magna cum laude from the University of Bologna in 1982. She completed her residency in Diagnostic Radiology in 1986 in the University of Bologna. Dr. Tampieri worked as neuroradiologist at Niguarda Ca'Granda Hospital from 1984–1987. Her post-graduate work was undertaken in Bologna as well as at the Karolinska Hospital in Stockholm and at McGill University, where she completed her fellowship.

She has served in many Academic and Professional Societies in Canada and abroad; and she was President of the Foundation of the Association of Radiologists of Québec from 2009 to 2017.

Her published works include over 160 peer reviewed papers and 20 chapters/books. Her work has been recognized with awards that include a first prize for a collaborative scientific paper presented at the annual meeting of the American Society of Neuroradiology and she has received the Bernadette Nogradi Prize in 1992. Dr. Tampieri was also awarded the Prix d'Excellence en Innovation des Soins de Santé from La Direction du Développement Professionnel Continue (DDPC) of the Fédération des Médecins Spécialistes du Québec (FMSQ) in September 2016.

CNS Richardson Lecture

Migraine: Circa 2019



David W Dodick, MD

David W. Dodick, MD, FACP, FRCP (C), FAAN, is Professor of Neurology at the Mayo Clinic College of Medicine in Scottsdale, Arizona. He is the Director of the Headache Program and the Sport Neurology and Concussion Program at Mayo Clinic in Arizona. He is an Adjunct

Professor in the Department of Neurosciences, Norwegian University of Science and Technology.

Dr. Dodick is board certified by the Royal College of Physicians and Surgeons of Canada and the American Board of Psychiatry and Neurology (ABPN). He also holds United Council for Neurologic Subspecialties certification in headache medicine and ABPN certification in vascular neurology. Dr Dodick has authored more than 380 peer-reviewed publications and authored/edited 10 books. He is the Chair of the American Migraine Foundation, American Academy of Neurology (AAN) Annual Program Concussion Committee, Co-Director of the American Registry of Migraine Research, Chair International Registry for Migraine Research, Chair International Headache Society Global Patient Advocacy Coalition, Co-Director of the Annual AAN Sports Concussion Conference, President-Elect of the International Concussion Society, Immediate Past-President of the International Headache Society, former Editor-in-Chief of *Cephalalgia*, and Past-President of the American Headache Society.



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CSCN Gloor Lecture

Development of a treatment guidance statement for Myasthenia Gravis



Donald B. Sanders, MD

Dr. Sanders is Professor of Neurology and Director of Neuromuscular Research at Duke University Medical Center, in Durham, NC, where he founded, and for 25 years, directed, the Duke EMG Laboratory and the Duke Myasthenia Gravis Clinic. He received his medical degree from Harvard University and developed an abiding interest in

the diagnosis and treatment of myasthenia gravis and related diseases while training in Neurology with Professor T.R. Johns, at the University of Virginia. He trained in Electromyography and Neuromuscular Physiology with Professor Edward Lambert at the Mayo Clinic, and has been at Duke since 1980.

Dr. Sanders has served as President of the Board of Directors of the American Association of Neuromuscular and Electrodiagnostic Medicine and of the Medical/Scientific Advisory Board of the Myasthenia Gravis Foundation of America. He has been a member of the Editorial Boards of Muscle & Nerve and the Journal of Clinical Neurophysiology and is a reviewer for many American and international medical journals. He is currently Chair of the North American Chapter of the International Federation of Clinical Neurophysiology and a member of the Executive Committee of that organization.

Dr. Sanders has authored more than 200 scientific publications on neuromuscular disorders, including early work on experimental autoimmune MG, diagnosis and treatment of neuromuscular diseases, the development of computer-assisted analysis of neurophysiologic signals, single-fiber EMG, the development and management of clinical trials in MG and Lambert-Eaton myasthenia, and, most recently, immunologic biomarker discovery in autoimmune neuromuscular disease.

CACN Tibbles Lecture

Modulating neurodevelopmental trajectories to enable children with perinatal brain injury



Adam Kirton, MD, MSc, FRCPC

Dr. Kirton is Professor of Pediatrics, Radiology, and Clinical Neurosciences at the University of Calgary and an attending Pediatric Neurologist at the Alberta Children's Hospital.

His research focuses on applying technologies including non-invasive brain stimulation and neuroimaging

to measure and modulate the response of the developing brain to early injury to generate new therapies.

He is a CIHR Foundation Grant recipient. Dr. Kirton directs the Calgary Pediatric Stroke Program, Alberta Perinatal Stroke Project, and the University of Calgary Noninvasive Neurostimulation Network (N3).

CNSS Penfield Lecture

Correction of Genetic Diseases of the CNS: Early Steps



Nalin Gupta

Dr. Nalin Gupta is currently Chief of Pediatric Neurosurgery at UCSF Benioff Children's Hospital in San Francisco and is the UCSF Benioff Distinguished Professor of Children's Health.

He grew up in Nova Scotia, attended McGill University and completed the majority of his medical training at the University of Toronto and the

Hospital for Sick Children. His graduate work in the Department of Biochemistry and Biophysics at UCSF was focused on the relationship between DNA damage and cell cycle progression.

His research interests are in the areas of neuro-oncology and congenital defects in children, with a particular interest in early phase surgical trials evaluating new and promising therapeutic strategies. These include fetal repair of myelomeningocele, stem cell transplantation for disorders of myelination, precision-based surgical trials for brainstem glioma, and convection-enhanced delivery of chemotherapeutic agents into the brain.



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CTS: Carpal tunnel syndrome

References: 1. Conceição I et al. "Red-flag" symptom clusters in transthyretin familial amyloid polyneuropathy. *Journal of the Peripheral Nervous System*. 2016;21(1):5-9. 2. Nakagawa M et al. Carpal tunnel syndrome: a common initial symptom of systemic wild-type ATTR (ATTRwt) amyloidosis. *Amyloid* 2016;23(1):58-63.



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2019 Congress Sessions Supported by Industry

These sessions are an opportunity for registered delegates to attend specific topics of interest and are developed by the CNSF and “Industry”. A light meal will be served.

Pre-registration is required for each activity through the Congress registration process.

Saturday, June 15, 5:00 – 8:00 pm • Dinner Session

A New Era in the Diagnosis and Management of Rare Neurological Disease

This program was developed by the CNSF, **Sanofi** and **Akcea** and was planned to achieve scientific integrity, objectivity and balance. It is an unaccredited learning activity and not eligible for MOC credits.

Course Chair: Angela Genge

Sunday, June 16, 12:30 – 2:00 pm • Lunch 'n Learns

Awake Craniotomy Utilizing Higher Cortical and Subcortical Mapping; A Canadian Perspective from Over 500 Cases

This program was developed by the CNSF and **Integra** and was planned to achieve scientific integrity, objectivity and balance. It is an unaccredited learning activity and not eligible for MOC credits.

Course Chair: John Sinclair

From Trial to Treatment: Uncovering Real-world Learnings in Epilepsy Management

This program was developed by the CNSF and **Eisai** and was planned to achieve scientific integrity, objectivity and balance. It is an unaccredited learning activity and not eligible for MOC credits.

Course Chair: Mark Sadler

Hereditary ATTR Amyloidosis — A “can’t miss” Diagnosis

This program was developed by the CNSF and **Amylam** and was planned to achieve scientific integrity, objectivity and balance. It is an unaccredited learning activity and not eligible for MOC credits.

Course Chair: Michelle Mezei

Sunday, June 16, 8:00 – 9:30 pm • Dinner Session

From Diagnosis and Beyond: A New Era of Treatment Possibilities for Patients with Rare Neuropathies

This program was developed by the CNSF and **Akcea** and was planned to achieve scientific integrity, objectivity and balance. It is an unaccredited learning activity and not eligible for MOC credits.

Course Chair: Kristine Chapman

Monday, June 17, 12:15 – 1:45 pm • Lunch 'n Learns

Clinical Management of MABs in Real Life

This program was developed by the CNSF and **Novartis Canada** and was planned to achieve scientific integrity, objectivity and balance. It is an unaccredited learning activity and not eligible for MOC credits.

Course Chairs: Elizabeth Leroux, Suzanne Christie

Getting Under the Skin: Subcutaneous Immunoglobulin in CIDP

This program was developed by the CNSF and **CSL Behring** and was planned to achieve scientific integrity, objectivity and balance. It is an unaccredited learning activity and not eligible for MOC credits.

Course Chairs: Angela Genge, Lynda Theoret

Shifting Paradigms in Pediatric Neurology: Focus on SMA and MS

This program was developed by the CNSF, **AveXis** and **Novartis** and was planned to achieve scientific integrity, objectivity and balance. It is an unaccredited learning activity and not eligible for MOC credits.

Course Chair: Hugh McMillan

Tuesday, June 18, 12:00 – 1:30 pm • Lunch 'n Learn

Laser Ablation

This program was developed by the CNSF and **Medtronic** and was planned to achieve scientific integrity, objectivity and balance. It is an unaccredited learning activity and not eligible for MOC credits.

Course Chair: Brian Toyota

Wednesday, June 19, 12:00 – 1:15 pm • Lunch 'n Learn

Advancing Understanding of New Therapeutic Options in ALS Management and the Patient Journey

This program was developed by the CNSF and **Mitsubishi Tanabe Pharma Canada** and was planned to achieve scientific integrity, objectivity and balance. It is an unaccredited learning activity and not eligible for MOC credits.

Course Chairs: Angela Genge, Colleen O’Connell

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Montreal Fun Facts

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▲ **Habitat 67 is a quirky housing complex designed by Moshe Safdie for Expo 67. Modules are stacked one on another to form 148 residences, nestled between sky and earth, city and river, greenery and light. It all comes together in a gigantic sculpture of futuristic interiors, links, pedestrian streets and suspended terraces, aerial spaces, skylights of different angles, large esplanades and monumental elevator pillars. Tours are still available of this incredible, unique complex.**

■ In 1967 Montreal hosted the World's Fair – Expo 67. Considered one of the most successful World Fairs of the 20th Century with 62 countries participating.

■ The famous Beatles song "Give Peace a Chance" was written by John Lennon and Yoko Ono at the Fairmont Queen Elizabeth Hotel during a weeklong "bed-in" in 1969.

■ The Montreal Biodome is an indoor nature exhibit which houses four unique ecosystems found in the Americas (currently under renovations until December 2019). The Biodome makes up part of the largest Natural Science Museum Complex in Canada. The complex also includes Space for Life, the Montreal Insectarium, Montreal Botanical Garden and Rio Tinto Alcan Planetarium.

© Régie des installations olympiques



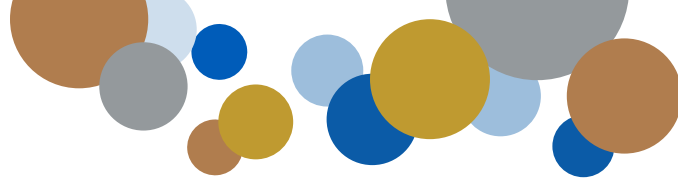
▲ **The Montreal tower is the tallest inclined tower in the world, with 165 meters and a 45 degree angle, overlooking the Olympic Stadium.**

■ Montreal hosted the first Olympics ever held in Canada in the summer of 1976. So far, this is the only "Summer" Olympic Games to be held in Canada. You can still visit the Olympic Stadium, the Montreal Tower and Olympic Park, which now houses the Montreal Biodome.

■ Mount Royal Park in Montreal was designed by Frederick Law Olmsted, who is the designer of New York City's Central Park. Definitely worth a look.

■ Saint Joseph's Oratory of Mount Royal is a Roman Catholic basilica built in 1904 and is now considered a National Historic Site. It is Canada's largest church and claims to have one of the largest domes in the world. This is a beautiful building full of history. Unfortunately, this church made news in March of this year when a 26 year old man entered during Friday mass, walked up the centre aisle and stabbed the priest, Father Claude Grou in the chest. Luckily the priest only suffered minor injury and is back to work, and the oratory remains a place where all people are welcome.

Exhibitor Listings



AbbVie

Booth 208

AbbVie combines advanced science, expertise and passion to solve serious health issues and have a remarkable impact on people's lives.

Akcea Therapeutics Canada

Booth 105 & 107

● Platinum

Akcea Therapeutics is a drug development and commercialization company focused on advancing RNA-targeted antisense therapeutics for patients living with rare diseases including hereditary transthyretin (hATTR) amyloidosis.

Alexion Pharma Canada

Booth 316

● Supporter

Alexion is a global biopharmaceutical company focused on serving patients and families affected by rare diseases through innovation, development and commercialization of life-changing therapies.

Alnylam Pharmaceuticals Canada

Booth 113

● Silver

Based on Nobel Prize-winning science, Alnylam is leading the translation of RNA interference (RNAi) into a whole new class of innovative medicines.

Brainlab

Booth 319

Brainlab develops, manufactures and markets software-driven medical technology, enabling access to advanced, less invasive patient treatments. Brainlab technology powers treatments in radiosurgery as well as neurosurgery and other surgical fields.

Carl Zeiss Canada

Booth 317

ZEISS drives the development of leading-edge technology for use in routine applications. Our neurosurgery portfolio includes a comprehensive line of surgical microscopes, visualization solutions and loupes that uncompromisingly enhance visualization.

Cambridge University Press

Booth 200

We further the University's mission by disseminating knowledge in the pursuit of education, learning and research at the highest international levels of excellence. Cambridge University Press is the proud publisher of Canadian Journal of Neurological Sciences.

Celgene Canada Inc.

Booth 114

● Silver

At Celgene Inc., we seek to deliver truly innovative and life-changing drugs for our patients. Our vision as a company is to build a major global biopharmaceutical corporation while focusing on the discovery, the development, and the commercialization of products for the treatment of cancer and other severe, immune, inflammatory conditions.

CSL Behring Canada

Booth 108

● Silver

A biotechnology company involved for more than a century with research and development related to severe and rare diseases, giving our support to patients with severe diseases.

Eli Lilly

Booth 405

● Bronze

Eli Lilly and Company is a global health care leader that unites caring with discovery to make life better for people around the world.

Eisai

Booth 109

● Gold

Eisai Limited (pronounced ā-zī) is the Canadian pharmaceutical subsidiary of Tokyo-based Eisai Co. Ltd, manufacturers of FYCOMPA and BANZEL. Eisai is a human health care (hhc) company seeking innovative solutions in disease prevention, treatment and care for the health and well-being of people worldwide.

GeneDx

Booth 314

GeneDx, a leader in genomics with expertise in rare genetic disorders, offers one of the broadest menus of sequencing services available and provides testing to patients in more than 55 countries.

GBS/CIDP Foundation of Canada

Booth 300

GBS/CIDP Foundation of Canada serves patients and families afflicted with GBS, CIDP, and variants such as MMN, with support, education, research, and advocacy.

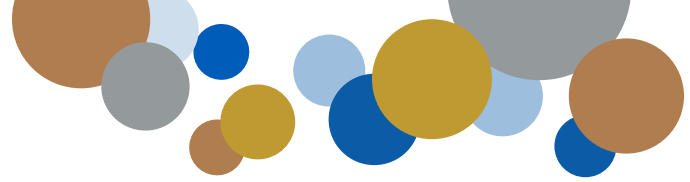
Hoffmann-La Roche Limited

Booth 110

● Gold

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.

Exhibitor Listings



Horizon Health Network Booth 101

Horizon Health Network has an annual budget of approximately \$1.1 billion and has more than 12,600 employees, 1,100 physicians and 4,400 volunteers, auxiliary and alumnae members.

Integra LifeSciences Booth 103

● Silver

Codman Specialty Surgical, a Division of Integra LifeSciences is a global leader in neurosurgery that combines the renowned brand of Codman with Integra's leading advanced technologies and broad surgical instruments and lighting portfolio.

LifeLabs Booth 310

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.

MD Financial Booth 306

● Silver

MD Financial Management is the only financial services firm exclusively dedicated to the financial well-being of Canada's physicians and their families.

Medtronic of Canada Ltd. Booth 307

● Gold

Through innovation and collaboration, Medtronic helps to improve the lives and health of millions of people each year. Learn more about our technology, services and solutions at Medtronic.ca.

Mitsubishi Tanabe Pharma Canada Booth 112

● Silver

Mitsubishi Tanabe Pharma Canada, Inc. (MTP-CA) is focused on providing therapies for some of the most difficult-to-treat diseases. We strive to make a difference for those struggling with devastating illnesses.

Natus Neuro Booth 102

Natus Neuro provides leading solutions for the neurodiagnostic, neurosurgery, and neurocritical care markets.

Novartis Booth 111

● Gold

Novartis Pharmaceuticals Canada Inc., a leader in the healthcare field, is committed to the discovery, development and marketing of innovative products to improve the well-being of all Canadians.

NeuroSource Medical Booth 315

We are a Canadian-owned neurodiagnostic distribution company made up of clinical professionals with combined expertise in EMG, EEG, IONM, SEEG and Sleep.

Paladin Labs Booth 313

Paladin Labs is a specialty pharmaceutical company, and member of Rx&D, focused on acquiring or in-licensing innovative pharmaceutical products for the Canadian market & select international markets.

PMT Corporation Booth 202

PMT's commitment to innovative products and customer satisfaction has made PMT a leader in neurosurgical products. Nationwide direct sales force is available 24 hours a day to assist you in meeting your specific patient's needs.

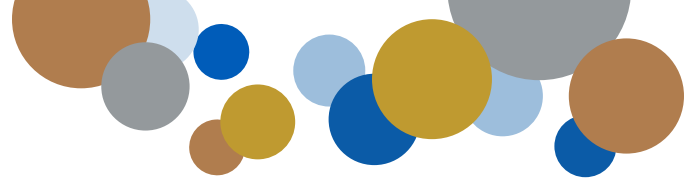
PTC Therapeutics Booth 407

● Bronze

PTC is a science-led, global biopharmaceutical company focused on the discovery, development and commercialization of clinically-differentiated medicines that provide benefits to patients with rare disorders.



Exhibitor Listings



Roxon Medi-Tech Ltd. Booth 308

Roxon is an established distributor of Neurology diagnostics systems for EEG/EMG/ICU/IOM, and TMS equipment as an aid to diagnosis and monitoring of neurological diseases.

Spinal CSF Leak Canada Booth 301

Spinal CSF Leak Canada is a not-for-profit organization. The purpose of the organization is to improve the lives of Canadians suffering from spontaneous intracranial hypotension caused by spinal CSF leaks.

Stryker Booth 401

● Silver

Stryker is one of the world's leading medical technology companies and is dedicated to helping healthcare professionals perform their jobs more efficiently while enhancing patient care.

Surgi-One Medical Technologies Inc. Booth 206

Surgi-One Medical Technologies Inc. is dedicated to supplying our Canadian Hospital customers with unique and innovative Neurosurgical, Neuro Critical Care, and Spinal Products to enhance the clinician's ability to provide the best patient care available.

Sunovion Pharmaceuticals Canada Inc. Booth 100

Sunovion Pharmaceuticals Canada Inc. (SPCI) is an innovative and entrepreneurial health care company that commercializes Sunovion's prescription products in Canada. We are focused in the areas of psychiatry, neurology and infectious disease. SPCI is committed to improving patient's lives in Canada through our people and our products.

Teva Canada Innovation Booth 116

● Bronze

At Teva, we care deeply about the wellbeing of the patients, caregivers and communities who rely on us. We serve 200 million people every day. From our role as a global leader in generic and brand-name medicines to the innovative solutions we create for our healthcare partners,—here in Canada and around the world.

Terumo BCT Booth 305

Terumo BCT, a global leader in blood component, therapeutic apheresis and cellular technologies. We believe in the potential of blood to do even more for patients than it does today. This belief unites our organization, inspires our innovation and strengthens our collaboration with customers.

Tilray Booth 204

Tilray is one of Canada's largest and most sophisticated producers of premium medical cannabis & cannabis products.

Valeo Pharma Inc. Booth 303

Valeo Pharma is a fully integrated Canadian specialty pharmaceutical company devoted to providing healthcare professionals and patients with the highest quality specialty products. Valeo Pharma has just launched Onstryv® (safinamide) a new treatment for Parkinsons disease.

Zimmer Biomet Booth 312

Zimmer Biomet is the home of ROSA®: a robotic assistant for minimally invasive neurosurgical procedures. ROSA® has applications in stereotactic neurosurgery, including SEEG, DBS, and biopsies.



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CNSF Virtual Exhibit Hall: veh.cnsfederation.org

FYCOMPA (perampanel) is indicated as adjunctive therapy in the management of partial-onset and primary generalized tonic-clonic (PGTC) seizures, in adult (≥18 years of age) and adolescent (12 years to 17 years of age) patients with epilepsy who are not satisfactorily controlled with conventional therapy.



HELP QUIET THE NOISE OF CONVULSIVE SEIZURES AIDEZ À CONTENIR LES CRISES CONVULSIVES

FYCOMPA (pérampanel) est indiqué comme traitement d'appoint dans la gestion des crises partielles et des crises généralisées tonico-cloniques primaires, chez les adultes (≥ 18 ans) et les adolescents (de 12 à 17 ans) atteints d'une épilepsie qui n'est pas maîtrisée de façon satisfaisante par un traitement conventionnel.

DEMONSTRATED SUSTAINED EFFICACY

- Achieved a **76% MEDIAN REDUCTION** in PGTC seizure frequency vs. **38%** with placebo¹
- **31%** of patients achieved **FREEDOM FROM PGTC SEIZURES** in the maintenance phase of the trial vs. 12% for placebo (1 in 3 patients)^{2,3*}

CONSISTENT SAFETY PROFILE

AEs and discontinuations were consistent across 4 well-controlled Phase III clinical trials and the most common were dose dependent (dizziness, somnolence, fatigue, and irritability)¹

UNIQUE MOA

The **FIRST** and **ONLY** non-competitive AMPA receptor antagonist that targets glutamate activity at postsynaptic neurons^{1,4,5,6†}

ONCE-DAILY DOSING

FYCOMPA offers proven clinical effectiveness, in a single pill, once-daily with a **105-HOUR HALF-LIFE**^{1†}

Clinical use:

Pediatrics (< 12 years of age): Safety and efficacy in children under 12 years of age has not been established. FYCOMPA is not indicated for use in this patient population.

Geriatrics (≥ 65 years of age): There is limited information on the use of FYCOMPA in patients 65 years of age and older. No dose adjustment based on age is necessary. In general, dose selection for an elderly patient should usually start 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.

Most serious warnings and precautions:

Serious psychiatric and behavioural reactions, including aggression- and hostility-related

- Serious or life-threatening psychiatric and behavioural adverse reactions including aggression, hostility, irritability, anger and homicidal ideation and threats have been reported in patients taking FYCOMPA
- These reactions occurred in patients with and without prior psychiatric history, prior aggressive behaviour or concomitant use of medications associated with hostility and aggression
- Advise patients and caregivers to contact a health care provider immediately if any of these reactions or changes in mood, behaviour or personality that are not typical for the patient are observed while taking FYCOMPA or after discontinuing FYCOMPA
- Patients taking FYCOMPA should be advised to avoid the use of alcohol, as it may exacerbate these effects

- Closely monitor patients particularly during the titration period and at higher doses
- FYCOMPA should be reduced if these symptoms occur and should be discontinued immediately if symptoms are severe or are worsening

Other relevant warnings and precautions:

- Aggression and hostility more frequent in adolescents (12-17 years)
- Substantial decrease in mean FYCOMPA blood levels for patients on concomitant CYP3A enzyme-inducing AEDs
- Inadequate data on maximal effective dosing for patients on concomitant CYP3A enzyme-inducing AEDs
- Drug interactions: strong CYP3A inducers other than AEDs; insufficient characterization of FYCOMPA metabolism
- Suicidal ideation and behaviour
- Abuse potential
- Galactose intolerance, Lapp lactase deficiency and glucose-galactose malabsorption
- Neurologic: withdrawal of AEDs; dizziness, disturbance in gait and coordination and falls; somnolence- and fatigue-related events; caution with driving and use of machinery
- Vision-related adverse events (diplopia, blurred vision)
- Use with hormonal contraceptives
- Use with other central nervous system depressants
- Use in patients with moderate or severe renal impairment or patients undergoing hemodialysis is not recommended
- Dosage adjustment is recommended in patients with mild and moderate hepatic impairment

For more information:

Please consult the Product Monograph at <http://eisai.ca/pdf/new/FYCOMPA-PM-EN-21Mar2018.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 Medical Information at 1-877-873-4724.

Pour de plus amples renseignements :

Veillez consulter la monographie de produit à l'adresse <http://eisai.ca/pdf/new/FYCOMPA-PM-FR-21Mar2018.pdf> pour obtenir d'autres renseignements importants sur les effets indésirables, les interactions médicamenteuses et la posologie qui n'ont pas été abordés dans le présent document.

Vous pouvez également obtenir la monographie de produit en appelant au Service d'information médicale d'Eisai au 1-877-873-4724.

- REFERENCES:** 1. Fycompa Product Monograph Eisai Limited, March 2018. 2. French JA, et al. Perampanel for tonic-clonic seizures in idiopathic generalized epilepsy. *American Academy of Neurology* 2015;85:1-8. 3. Data on File, CSR 332; July 18, 2014. 4. Rogawski MA, Revisiting AMPA Receptors as an Antiepileptic Drug Target. *Epilepsy Currents* 2011;(11)2:56-63. 5. Hanada T, et al. Perampanel: A novel, orally active, noncompetitive AMPA-receptor antagonist that reduces seizure activity in rodent models of epilepsy *Epilepsia* 2011;52(7):1331-1340. 6. Rogawski MA, et al. Preclinical pharmacology of perampanel, a selective non-competitive AMPA receptor antagonist *Acta Neurol Scand* 2013;127(suppl.197):19-24.

* Prespecified exploratory endpoint.²
† Clinical significance is not known.



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Congress Schedule

SATURDAY JUNE 15

5:00 – 8:00 pm

Dinner Session

A New Era in the Diagnosis and Management of Rare Neurological Disease

SUNDAY JUNE 16

8:30 – 11:00 am

Courses

- Common and Uncommon Vascular Diagnostic Challenges and their Interventional Management
- Advanced Monitoring in the Neurocritical Care Patient
- High-grade Gliomas Throughout the Lifespan – Pediatrics
- Neurology Residents' Course: Epilepsy
- Neurosurgery Residents' Course: Congenital Malformations

11:15 am – 12:15 pm

Poster Moderated Sessions

12:30 – 2:00 pm

Lunch 'n Learns

- Awake Craniotomy Utilizing Higher Cortical and Subcortical Mapping; A Canadian Perspective from Over 500 Cases
- From Trial to Treatment: Uncovering Real-world Learnings in Epilepsy Management
- Hereditary ATTR Amyloidosis – A "can't miss" Diagnosis

2:00 – 4:30 pm

Courses

- Technology in Medical Imaging
- Challenges in TBI Management
- High-grade Gliomas Throughout the Lifespan- Adult
- Neurology Residents' Course: Epilepsy
- Neurosurgery Residents' Course: Pediatric Neurosurgery

4:30 – 5:30 pm

SPC/PDC Meeting

5:30 – 7:30 pm

Clinical Case Studies (CCS)

- Neuromuscular
- Epilepsy Video Session
- Neurosurgery- Fireside Chat
- Active Management of Complex Issues in Movement Disorders
- Women's Health and Migraine
- Case Based Neuroradiology Review

7:30 pm

Residents' and Faculty Social

8:00 – 9:30 pm

Dinner Session

From Diagnosis and Beyond: A New Era of Treatment Possibilities for Patients with Rare Neuropathies

MONDAY JUNE 17

7:00 – 8:00 am

CSCN EEG Section Meeting

8:00 – 12:00 noon

Grand Plenary

CNSR – Terbrugge Lecture: Donatella Tampieri – Hyperacute Stroke Organization: does one organizational model fit all hospital realities?

CNS – Richardson Lecture: David Dodick – Migraine: Circa 2019

CSCN – Gloor Lecture: Donald Sanders – Development of a Treatment Guidance Statement for Myasthenia Gravis

CACN – Tibbles Lecture: Adam Kirtou – Modulating Neurodevelopmental Trajectories to Enable Children with Perinatal Brain Injury

CNSS – Penfield Lecture: Nalin Gupta – Correction of Genetic Diseases of the Central Nervous System: Early Steps

Society Prize Winners: present during Grand Plenary

12:15 – 1:45 pm

Lunch 'n Learns

- Clinical Management of MABs in Real Life
- Getting Under the Skin: Subcutaneous Immunoglobulin in CIDP
- Shifting Paradigm in Pediatric Neurology: Focus on SMA and MS

12:15 – 1:45 pm

- CNSS AGM
- CNSR AGM

2:00 – 4:30 pm

Courses

- Pituitary Tumour
- INPH: Sorting Through Assessment and Treatment
- Huntington Disease: The Dawn of a New Era in Neurodegenerative Disorders
- Stroke Prevention- Beyond the Usual Suspects
- New Developments in Neurocognitive Disorders

4:30 pm

- CNS AGM
- CSCN EEG Section Meeting

4:30 – 6:30 pm

Exhibitors' Reception

7:00 pm

Society Dinners:

- CACN
- CNSS
- CNSR

TUESDAY JUNE 18

6:30 – 8:00 am

Journal Board Meeting

8:00 – 10:30 am

Society Day AM Courses

Child Neurology (CACN) Day: Pediatric Translational Neuroscience

Neurophysiology (CSCN) Day: EEG: Focal Epilepsies and Epileptic Encephalopathies

Neurology (CNS) Day: What's New in Headache?

Neuroradiology (CNSR) Day: Emergency Neuroradiology: everything you need to know!

Neurosurgery (CNSS) Day:

- MIS Spine
- Surgical Education and Innovative Teaching Methods

10:45 – 11:45 am

Poster Moderated Sessions

12:00 – 1:30 pm

Lunch 'n Learn

Laser Ablation

12:00 – 1:30 pm

Lunch in the Exhibit Hall

1:45 – 4:15 pm

Society Day PM Courses

Child Neurology (CACN) Day: Pediatric Translational Neuroscience

Neurophysiology (CSCN) Day: EMG in Everyday Practice

Neurology (CNS) Day: An Update in CNS Demyelinating Diseases

Neurosurgery (CNSS) Day:

- Innovation and Technology in Neurosurgery
- Multidisciplinary Neurovascular Treatment: Technical Advances, Program Development, and Future Training Expectations

4:15 – 6:30 pm

Wine and Cheese in Exhibit Hall

4:30 – 6:00 pm

- CACN AGM
- CSCN AGM

WEDNESDAY JUNE 19

8:00 – 9:00 am

Chairs' Select Abstracts

CNS, CACN/ CSCN, CNSS/CNSR – Selected as part of abstract review process

9:00 – 10:00 am

Poster Moderated Sessions

10:00 – 12:00 noon

Hot Topic Courses

Hot Topics in Neurology: International Neurology

Hot Topics in Neurosurgery: How Do Novel Neurosurgical Interventions Get Adopted?

Hot Topics in Child Neurology: Technology in Pediatric Neurology

Hot Topics in Clinical Neurophysiology: Neuromuscular

Hot Topics in Neuroradiology: Inflammatory Amyloid Angiopathy Spectrum / Update on Glymphatics

12:00 – 1:15 pm

Lunch in Exhibit Hall

12:00 – 1:15 pm

Lunch 'n Learn

Advancing Understanding of New Therapeutic Options in ALS Management and the Patient Journey

1:15 – 3:15 pm

Grand Rounds

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The CNSF's major supporters are listed below, none of whom have had any input into the CNSF's CPD programs, the Congress, or the Journal. Most importantly, our Congress courses, programs and speakers are selected independently by our Scientific Program and Professional Development Committees and ultimately approved by each Society and the CNSF Board.

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Akcea Therapeutics Canada: for the support of two 'dinner sessions', the purchase of 2 Exhibit booths, Neuro|News advertising, sponsorship of the 2019 Congress App and the Delegate Gift and on site Post Card distribution.

GOLD

Eisai: for the support of a Lunch 'n Learn, the purchase of an Exhibit booth, Neuro|News advertising, sponsorship of the Branded Key Cards and on site Post Card distribution.

Hoffmann-La Roche: for the sponsorship of Congress lanyards, the purchase of an Exhibit booth, and Section 1 co-developed programs across Canada for Neurologists and Nurses on MS.

Medtronic Canada: for the support of a Lunch 'n Learn, the purchase of 3 Exhibit booths and support of the Neurosurgery Residents' Cadaveric course (external to the Congress).

Novartis: for support of a Lunch 'n Learn, the purchase of an Exhibit booth and advertising in the Neuro|News.

SILVER

Alnylam Pharmaceuticals: for the support of a Lunch 'n Learn, the purchase of an Exhibit booth and advertising in Neuro|News.

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Celgene Inc. Canada: for the support of the Grand Plenary and Grand Rounds sessions and a booth purchase.

CSL Behring: for the support of a Lunch 'n Learn and the purchase of an Exhibit booth.

Grifols: for the general support of the CNSF, the support of the Neuromuscular Clinical Case Study and a Fellowship Grant to CSCN for 2018/2019.

Integra: for the support of a Lunch 'n Learn and the purchase of 2 Exhibit booths.

MD Financial Management: for sponsorship of the Exhibitors' Reception and the Residents' and Faculty Social, the purchase of an Exhibit booth, Neuro|News advertising, and the purchase of advertising in each issue of the Journal.

Mitsubishi Tanabe Pharma Canada: for the support of a Lunch 'n Learn, the purchase of an Exhibit booth, Neuro|News advertising and on site Post Card distribution.

Stryker Canada: for the purchase of 2 Exhibit booths and for a Grant and equipment in support of the Neurosurgery Residents' Cadaveric course.

BRONZE

Eli Lilly Canada: for Neuro|News advertising, the purchase of an Exhibit booth, sponsoring the Congress Course Notes web site and a Clinical Case Study.

PTC Therapeutics: for support of CACN day and the purchase of an Exhibit booth.

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