

CNS Newsletter



ANNUAL SCIENTIFIC MEETING OF THE
CANADIAN NEUROMODULATION SOCIETY
CALGARY, AB, CANADA
SEPTEMBER 17-19, 2026



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PAST AND UPCOMING EVENTS:

***Interventional Pain and
Neuromodulation Procedures
Workshop for Trainee Physicians***
Halifax, NS | February 8-10, 2026

***17th World Congress of the
International Neuromodulation Society.***
9-14 May 2026 | Lisbon, Portugal

Annual Scientific Meeting of the CNS
Calgary, AB | September 17-19, 2026

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President's Note



Welcome to this spring issue of the CNS Newsletter!

There have been some exciting developments in neuromodulation in Canada. The Canadian Neuromodulation Society awarded its first ever Mentored Early-Stage Investigator Award of CAD 20,000 to Dr. Benjamin Davidson with Dr. Nir Lipsman as his mentor. Dr. Davidson's research project is "*Quantitative Prognostication and Biomarker-Guided Neuromodulation in Severe Traumatic Brain Injury*". The CNS congratulates both Dr. Davidson and Lipsman who are Neurosurgeons and Scientists at Sunnybrook Health Sciences Centre in Toronto, Ontario.

Speaking of scientific meetings, preparations for our ASM are in full swing! Continuing with the tradition of having collaborative meetings with National Chapters of the International Neuromodulation Society (INS), our ASM will feature the Swiss Neuromodulation Society as the invited society. Our ASM will run over three days from September 17 to 19, 2026 at The Westin in Calgary. We have planned an exciting program with some new features such as pro-con debates on scientific controversies in neuromodulation and a "Hot Topics in Neuromodulation" session. I hope to see many of you at the ASM and the associated social events!

I would also like to remind everyone of the upcoming 17th World Congress of the INS in Lisbon, Portugal from May 9-14, 2026. Many members of the CNS are attending and presenting at scientific sessions in this meeting. Further, for the first time, there will be a Cross-Chapter meeting in Lisbon on May 10 from 330 pm to 530 pm (just before the Opening Reception) that will be hosted collaboratively between the Benelux, Nordic, Italian, Canadian, and UK-Ireland chapters of the INS. This session will provide an excellent opportunity for researchers to present their scientific work. I look forward to meeting many of you at the Congress.

Warm regards,

Anuj Bhatia MD PhD FRCPC
President, Canadian Neuromodulation Society

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***Editor's Note***

Dear CNS members,

I hope everyone is enjoying the winter generously extended itself well into March in Canada.

This is my first newsletter as Trainee Representative and Editor, and I am very grateful to be taking over from Dr. Himanshu Gupta. In this issue, you will find a featured discussion on SCS practice in the USA and Canada: similarities, differences, and lessons for the future, alongside updates from the Society and upcoming CNS activities.

I hope you enjoy this month's issue. Thank you as always for your continued support of CNS.

Seung Cheol (Paul) Kim, MD
Editor & Trainee Representative
Clinical Fellow in Pain Medicine and Neuromodulation
Toronto Western Hospital, University of Toronto

SCS practice in the USA and Canada: similarities, differences, and lessons for the future



Dr. Ehtesham Baig is a dually certified anesthesiologist and pain medicine physician currently practicing at the University Health Network and affiliated with the department of anesthesiology and pain medicine at the University of Toronto. He is the director of the UHN Cancer Pain Clinic which is involved in treating cancer and palliative pain using both medical and interventional treatment modalities.

From your perspective, where do you see the biggest differences between SCS practice in the USA and Canada?

The most striking difference lies in the fundamental architecture of resource allocation and how it dictates clinical momentum. In the US, the system is highly decentralized and largely driven by fee-for-service and commercial insurance models. This generally allows for much faster adoption of newer technologies and shorter wait times from referral to implantation. However, it also introduces a high degree of administrative friction, particularly regarding prior authorizations. Furthermore, the US model is notably industry-driven. The ubiquitous presence of vendor representatives in the clinical workflow accelerates throughput but can also deeply influence practice patterns, creating an ecosystem where clinical choices are heavily intertwined with industry support.

In Canada, practice is defined by centralized, single-payer provincial funding and global institutional budgets. While this creates a more equitable landscape for patient selection - driven purely by clinical indication rather than insurance status - it also introduces significant bottlenecks. Device quotas and limited OR time at tertiary centers dictate the pace of practice, often resulting in prolonged waitlists that can exacerbate the chronicity of a patient's pain before an intervention is even trialed.

In your experience, how much do funding and reimbursement influence access to SCS and the overall patient journey in the two systems?

Funding models entirely architect the patient journey in both jurisdictions, however, in opposite directions. In the US, reimbursement structures incentivize throughput.

The journey is often faster, but it is heavily gated by insurance approvals, meaning access is closely tied to a patient's specific health plan.

Conversely, in the Canadian system, the patient journey is heavily influenced by institutional funding caps. Once a hospital's annual allocation for neuromodulation devices is exhausted, patients simply have to wait, regardless of the clinical urgency or the severity of their pain. This economic reality means Canadian practitioners often have to be far more conservative and hyper-selective during the screening process, ensuring that the limited devices available go to patients with the highest probability of long-term success.

Are there any lessons from US practice that could be helpful in Canada and, equally, what strengths of Canadian practice should be preserved?

Canada could greatly benefit from observing the agility of the US system, particularly its use of Ambulatory Surgery Centers (ASCs) for neuromodulation. Moving SCS trials and increasingly, permanent implants out of main hospital operating rooms and into streamlined, high-throughput outpatient settings would significantly alleviate the surgical backlogs we face here. Furthermore, the US system's rapid integration of digital health tools and remote programming could help Canadian clinics manage expansive geographic catchments more efficiently.

However, a core strength of Canadian practice that must be rigidly preserved is our objective, evidence-based approach to patient selection and our culture of deep, clinician-led management. In the US, the high-volume nature of the practice often necessitates delegating device programming and troubleshooting to vendor representatives. Over time, this can lead to a gap in education and a diminished mechanistic understanding of programming modes among clinicians. In Canada, we must continue to champion comprehensive physician and nursing education so that the entire multidisciplinary clinical team retains mastery over the technology and the physiological principles of neuromodulation, ensuring patient care remains robust and independent of industry influence.

From your experience, are there aspects of trial practice, implantation workflow, or follow-up care in Canada that deserve more attention or could be approached differently?

Our implantation workflow urgently needs structural innovation, specifically regarding where these procedures take place. Relying on tertiary care ORs where neuromodulation is constantly competing for time against other surgical services is unsustainable. Transitioning to dedicated ambulatory care workflows would dramatically improve access.

Additionally, follow-up care and patient selection deserve a systemic, technology-driven rethink. As our implanted patient population grows, the clinical burden on specialized centers increases. This is where the integration of Artificial Intelligence (AI) and

advanced digital health platforms offers a profound opportunity to innovate the Canadian pathway.

Given our centralized resource constraints, AI-driven predictive analytics could be leveraged to better stratify patients during the screening and trial phases, ensuring our limited device allocations are utilized optimally based on objective data trends. Post-implantation, we need health system policies that support decentralized care. By adopting digital health ecosystems incorporating wearables, AI-monitored symptom tracking, and remote programming we can transition from a reactive, clinic-based follow-up model to a proactive, remote-monitoring paradigm. Establishing these strong, tech-enabled shared-care models would ensure that highly specialized pain centers maintain the capacity to evaluate new, complex patients rather than being overwhelmed by routine device maintenance.



Dr. Philip Chan is an Associate Clinical Professor in Anesthesia at McMaster University, Director of the Chronic Pain Clinic in Hamilton, and Medical Director of the Neuromodulation Program at Hamilton Health Sciences.

From your perspective, where do you see the biggest differences between SCS practice in the USA and Canada?

There is much greater accessibility to SCS in the US compared to Canada, and physicians in the US have access to a much greater variety of devices.

In your experience, how much do funding and reimbursement influence access to SCS and the overall patient journey in the two systems?

Funding and reimbursement improves access to SCS for certain segments of the American populations who have good insurance coverage.

Are there any lessons from US practice that could be helpful in Canada and, equally, what strengths of Canadian practice should be preserved?

Given more widespread access to SCS in the US, it tends to be considered earlier in the pain treatment algorithm. However, I would say that American pain physicians tend to be more aggressive in terms of interventions (whether it be surgery, pain injections,

or medications), and sometimes this tendency to "overtreat" may not be in the patient's best interest.

4. In your view, what is working well in the current Canadian referral and patient selection pathways for SCS, and is there still room for improvement?

There is too much variation between the referral process and access to neuromodulation care between provinces to make generalized comments. As for room for improvement, more equitable access across the country to this intervention would be great.

Currently, the pain care that a patient receives depends a lot on who they happen to see first - this is not unique to Canada by any means, but I think the old adage "when you only have a hammer, everything looks like a nail" is apt - whether a patient gets surgery, or an injection, or receives CBT, or engages in exercise and rehab - will depend a lot on the background and biases of the initial treating physician. In an ideal world, pain patients should receive the same evidence-informed pain care regardless of their initial point of contact, whether it be a surgeon, a pain

medicine specialist, etc. In our siloed system, that is hard to do in practice, as patients often feel like they're being bounced from practitioner to practitioner e.g. they get referred to spine surgery, but are told "sorry, you're not a good surgical candidate. You should get an injection", then they wait months to see a pain clinic, only to be told they're not a good candidate for interventions and they should do rehab, but then they can't afford to see a PT and there is no easy access in

the community for CBT... A more integrated multidisciplinary pain care system would ideally deliver a consistent message to the patient about how to manage their pain and offer a "one-stop" place for them to receive all the relevant components of care, including SCS if appropriate. Building in appropriate access to practitioners versed in the implantation and management of SCS will hopefully ensure appropriate candidates receive this technology in a timely fashion.



Dr. Puneet Sayal is an Assistant Professor at the University of Toronto, University Health Network. He completed his anesthesiology residency at the Massachusetts General Hospital and pain medicine fellowship at MD Anderson Cancer Center. After gaining experience in private practice in the US in both anesthesiology and pain medicine, he has recently transitioned to an academic role in Toronto, Canada. His clinical interests are cancer pain and neuromodulation.

From your perspective, where do you see the biggest differences between SCS practice in the USA and Canada?

The biggest differences between the practice of SCS in Canada and US centers around its organization. In Canada, neuromodulation programs are housed in academic centers with dedicated funding. This contrasts from the US structure where both academic and private groups will offer neuromodulation (trial and implant) in a variety of settings (trials typically in clinic or ambulatory surgery center, permanent implants in the ambulatory surgery center or hospital), in coordination with a greater variety of insurers who have differing guidelines on which patients will or will not be approved for neuromodulation. The relationships with our surgical colleagues also vary, where some pain medicine physicians will refer all permanent implants to the surgical services, versus performing permanent implants themselves. Some surgeons have even learned percutaneous lead placement for permanent implants. The delivery of this care in the US is driven by market forces and competition much more aggressively than the Canadian structure, similar to other areas of healthcare.

In your experience, how much do funding and reimbursement influence access to SCS and the overall patient journey in the two systems?

Funding and reimbursement are typically the biggest factors influencing access to SCS care. In Canada, we are limited by the number of implants funded, and in the US are limited by insurer guidelines in terms of what will or will not be approved. These factors limit access for patients and make programs much more selective in who they will offer the therapy to, in both contexts. The fundamental principle of universal healthcare in Canada means that every patient will at least have access to the therapy, if appropriate. In contrast in the US, the same patient may or may not have access to the therapy based on the guidelines for approval for their specific insurer.

Are there any lessons from US practice that could be helpful in Canada and, equally, what strengths of Canadian practice should be preserved?

Regarding lessons from US practice, there are examples of quality and outcome-based payment structures in the US that could drive innovation and a greater focus on outcomes, patient journey and experience if applied in the Canadian context. The greatest strength of Canadian practice is the need to be selective in offering the therapy to patients that are most likely to benefit from it, as there is a limit on how many are funded. This limits inappropriate care, usually driven by inappropriate incentives, usually financial.

Given your US training and experience, are there aspects of SCS workflow, programme structure, or training that you think would translate particularly well to the Canadian setting?

There is a greater variability in practice style in the US in terms of practice set up (academic vs private, clinic vs ASC vs hospital etc) and which procedures each provider performs, specifically in the realm of the advanced procedures. Providers will decide to offer advanced therapies based on their

training/experience, reimbursement and care delivery structures they function in. This variety improves access for patients and gives the physicians greater flexibility in their practice style. Many things would need to change in the Canadian context to achieve this, but physicians having more options for their role and breadth in the delivery of pain medicine care would revamp training, improve care and access for patients and make physicians more effective.

Interventional Pain and Neuromodulation Procedures Workshop for Trainee Physicians - Halifax, NS / February 8-10, 2026

The **Interventional Pain and Neuromodulation Procedures Workshop for Trainee Physicians**, held in Halifax from 8–10 February 2026, offered fellows and residents a rich three-day educational experience focused on contemporary interventional pain and neuromodulation practice. Hosted at the **QEII Skills Centre, Dalhousie University**, and led by **Dr Lutz Weise** with coordination by **Ally Klassen**, the workshop featured a strong faculty including **Dr Anuj Bhatia, Dr Philip Chan, Dr Ehtesham Baig, Dr Antonios El-Helou, Dr Jill Osborn, Dr Ashley Cox, Dr Abeer Alomari, Dr Manikandan Rajarathinam, and Dr Ivan Cohen**. Through a combination of lectures and hands-on rotations, trainees gained exposure to a broad range of procedures, including ultrasound-guided spine and peripheral nerve interventions, intrathecal therapies, sacral nerve stimulation, dorsal root ganglion stimulation, and spinal cord stimulation, including minimally invasive and open surgical techniques.



"An informative, hands-on experience with excellent faculty - Strongly recommended!", Dr Sam Wong, FRCA, FFPMRCA, Chronic Pain Fellow, Toronto Western Hospital



Upcoming Events

17th World Congress of the International Neuromodulation Society.

Neuromodulation: Bridging Minds, Machines, and Medicine.

9-14 May 2026 | Lisbon, Portugal

[INS 2026 | 9-14 May 2026, Lisbon, Portugal](#)

Annual Meeting of the Canadian Neuromodulation Society Invited Society: Swiss Neuromodulation Society

Calgary, Alberta September 17th-19th, 2026.

Look out for Abstract Submission information and registration details shortly.

[Calgary 2026 – Canadian Neuromodulation](#)

By the way

To make this newsletter happen, we would like to have your input!

You can send us your work/advancements/experience on the following topics:

- **What's out there:** Short reviews of recent advances on neuromodulation topics
- **This is how I do it:** Share with us your tips and tricks for performing neuromodulation procedures
- **My clinic/program:** Brief report on the unique features of your neuromodulation clinic/program
- **My lab:** Brief report on your neuromodulation research set-up
- **Never too late to learn:** Any educational event that you are organizing including information about upcoming national/international meetings
- **Curious cases:** Interesting case reports from your practice
- **Letter to the Editor:** Response to articles or topics addressed in the CNS newsletter

Please send your contribution to s.kim@doctors.org.uk. Thank you!



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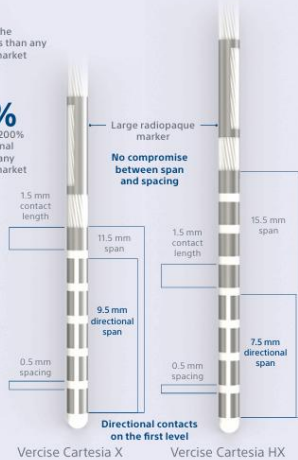
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Boston Scientific is committed to innovation that will make a difference for you and your patients today. Introducing Vercise™ Cartesia™ X and HX, the first-and-only 16-contact directional leads. These leads offer the best in span, spacing, and directionality.

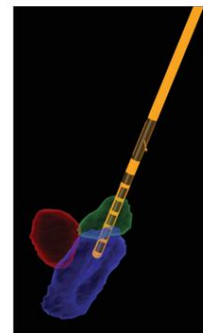
2.5 times the directional contacts than any other lead on the market

>200%

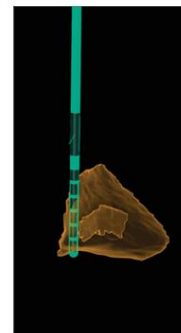
These leads offer >200% increase in directional span compared to any other lead on the market



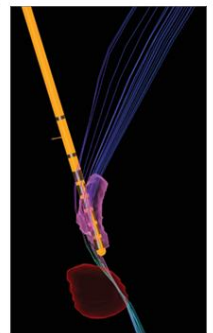
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⁹For more information on our industry-leading 9-year INS limited warranty, contact rs.rtgwarranty@medtronic.com.

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LIBERTA RC™ DBS SYSTEM OVERVIEW

Comparative Table

	LIBERTA RC™ DBS SYSTEM	BOSTON SCIENTIFIC [†] VERCISE GENUS R16	MEDTRONIC [†] PERCEPT RC
MAX DIMENSIONS (MM)	✓ 38.7 x 48.1 x 9.3 ³	✗ 52.1 x 46 x 10.7 ¹⁰	⊖ 57 x 47 x 9 ¹¹
VOLUME (CC)	✓ 13.6cc ³	✗ 20.1cc ¹⁰	⊖ 13.77cc ¹¹
RECHARGE TIME PER WEEK	✓ 30 min ³	✗ > 35 min ¹²	⊖ > 30 min ^{5,13}
MAX CHARGE DURATION	✓ 37 days ³	⊖ 30 days ¹⁴	✗ 12.6 days ¹⁵
REMOTE PROGRAMMING	✓ NeuroSphere™ Virtual Clinic ⁶	✗ No	✗ No
PATIENT CONTROLLER	✓ Provided iPhone ⁸ (or personal iPhone) ^{17,18}	✗ Provided remote control ¹⁸	⊖ Provided Samsung ² handset ¹⁹
NO FORCED EOS (END OF SERVICE)	✓ No EOS ³	✓ No EOS ¹¹	✓ No EOS ¹¹

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* Upon implant of the Liberta RC™ DBS System when programmed with nominal stimulation settings as described in device instructions for use. Recommended recharge frequency and duration for competitor product described in their respective IFU or clinical studies, which may involve different patient populations and other variables. Not a head-to-head comparison of stimulation settings or clinical outcomes.

** Available on eligible Apple® mobile digital devices. For a list of personal Apple® mobile digital devices compatible with Abbott's Patient Controller app, visit <http://www.NMmedtronic.com/vibe>.

† US market only. Based off comparison to volume of the following smallest IPG offerings from US DBS manufacturers: Abbott Liberta RC™ DBS System: 13.6 cc, Boston Scientific Vercise® Genus R16: 20.1 cc and Medtronic Percept® RC: 13.77 cc.

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