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CANADIAN IOM NEWS Official Newsletter of CANM

Message from the President

These are indeed very exciting times for intraoperative neurophysiological monitoring (IOM) in Canada. First, let me congratulate Gina Bastaldo (CANM communications director), our corporate sponsors, and Andrew John Publishing for this inaugural CANM newsletter, designed to keep you informed about Canadian IOM news.

Second, CANM has been working hard to plan the course of IOM education, training, and standards in Canada. In response to the CANM surveys, we plan to establish a Canadian IOM examination and offer IOM certification by 2016. In anticipation of that, we have already started developing an online IOM certificate program (in close association with a recognized university). One of the modules will be launched on September 28 and 29, 2012, at the CANM symposium in Vancouver. The module, titled Principles of Electrical Stimulation of the Nervous System, will be free for all registrants at the meeting. Eventually, all modules will be available in French and English (and likely other languages). I would like to acknowledge the efforts of Jonathan Norton, Laura Holmes, Gina Bastaldo, Charles Dong, Roger Sarjeant, Susan Morris, and Sam Strantzas in developing the strategic plan and education module. To my knowledge, no other body has launched a unified national IOM education, training, and standards program.

Now we need your feedback. The CANM symposium has been described as one of the best IOM education events in North America. Please mark September 28–29 on your calendar and help us make this landmark CANM meeting in Vancouver the best yet!



D. A. Houldmin

David Houlden, PhD
President, CANM

5th Annual CANM IOM Symposium

VANCOUVER, BRITISH COLUMBIA | SEPTEMBER 28–29, 2012

n behalf of the organizing committee, I invite you to attend the 5th Annual IOM Symposium Canadian Association Neurophysiological Monitoring (CANM), which will take place in Vancouver, British Columbia, on September 28–29, 2012. This year's scientific program will provide you with comprehensive updates in intraoperative neurophysiological monitoring for neurosurgical, spine orthopedic, and cardiovascular procedures. Our local, national, and international experts will form an outstanding faculty, bringing you their valuable experiences and speaking on important but controversial issues. Among them will be Dr. David MacDonald, who has, fortunately for us, agreed to give a keynote address on motor evoked potentials (MEP) monitoring criteria. We will continue to have highly acclaimed and very interactive case presentations from centres coast to coast and beyond. Please do consider submitting your case presentations and engaging in thought-provoking discussions with your colleagues. For those of you who have been to beautiful Vancouver, it will be difficult to resist the temptation to revisit it. For those who have not, it is likely one of your dreams to go and see it someday. A vibrant, multicultural city on the west cost, Vancouver is the largest city in British Columbia, with over half a million residents, and it has been consistently ranked among the top five livable cities in the world. It was the home to the 2010 Winter

Olympic Games. Surrounded by water on three sides and nestled alongside the Coast Mountain Range, Vancouver is known for its natural scenic beauty. Majestic mountains, a sparkling ocean, and spectacular rainforests make it one of the most desirable cities to visit.

Vancouver has much more to offer. The conference venue, the Pan Pacific Hotel, is located in a very safe and convenient downtown area, a 20-minute drive or a pleasant SkyTrain ride from the Vancouver International Airport, and has easy access to the world-renowned Whistler Resort, Canadian Rockies, Victoria, and other incredible attractions. The venue also provides leading-edge meeting facilities and superb hotel accommodations.

While enjoying stimulating lectures from well-known experts and rejuvenating your knowledge and skills, you will have the opportunity to network with colleagues, mentors, and friends. Between the carefully designed scientific program and the many attractions Vancouver has to offer, you will have an unforgettable time in Vancouver.

I remind you to visit www.canm.ca for symposium updates. I look forward to meeting you in Vancouver.

Charles Dong, PhD

Chair, 5th CANM IOM Symposium Organizing Committee Director, CANM









CANM Education Retreat

annual CANM meeting is widely acknowledged as a fantastic educational opportunity. Yet it is just once a year, and the surveys performed at these meetings consistently highlight the need for further education on IOM. To that end, the CANM Executive Board, along with Roger Sarjeant (Toronto), Sam Strantzas (Toronto), and Susan Morris (Halifax), met at the Hospital for Sick Children in Toronto on the weekend of February 25–26. The aim of the retreat was to develop a plan for Canadian IOM education. We will present further details on our discussions at the Vancouver meeting in September. Because of the geographical spread across the country, we strongly feel that online modules are the most practical way to develop an education program. These modules will fit into general courses covering larger

themes. We will be developing the first module in time for rollout and testing at the Vancouver meeting. We hope that practitioners with various levels of experience will be able to participate in the module and provide feedback.

The CANM Executive Board views this as an important initiative of CANM and is excited by the developments already made. We will need the help and support of the CANM membership to make this a viable option. At this stage, we have made no firm commitments as to which organization we will partner with in the provision of these courses.

Jonathan Norton, PhD

Vice-President, CANM

Interested in Joining CANM?

an integral role in the evolution of CANM. These early years of our development offer an unparalleled opportunity to participate in policy decisions that will guide our association for years to come. We value your input and welcome the opinions of all health care professionals, regardless of your level of IOM expertise. Your support is vital to the growth of our young association, particularly now as CANM begins an educational mandate that includes online modules and a certification examination. As discussed at the 4th Annual CANM IOM Symposium, *full members* will be exempt from various prerequisites

required for the certification examination. In addition, all members will enjoy a discounted rate at annual symposiums. If you would like to qualify for these benefits and you are interested in shaping the future of neurophysiological monitoring in Canada, please consider joining our community. Together we can ensure that this vital field of healthcare has a voice not only at home, but on the world stage as well.

Do not just witness our evolution, become an active participant. Please register today!

Gina Bastaldo, BScH, CNIM

Communications Director, CANM

FULL MEMBERSHIP (\$150)

- Primary role in the operating room is neuromonitoring
- Minimum of 200 surgical cases monitored
- Majority of practice is located within Canada
- Eligible to vote, hold office, and sit on committees within CANM
- Receive a discount to the annual meeting

ASSOCIATE MEMBERS (\$85)

- Primary role is *not* neuromonitoring (i.e., surgeons, anaesthesiologists, etc.)
- Less than 200 surgical cases monitored or
- Majority of practice is located outside of Canada
- Not eligible to vote or hold office but may sit on committees
- Receive a discount to the annual meeting

Visit www.canm.ca for membership application and payment details.

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CANM Inaugural Members*

2012 CANM FULL MEMBERS

Nimira Bapoo - Vancouver, British Columbia Gina Bastaldo - Toronto, Ontario Kristina Cushman - Toronto, Ontario Dianne Dash - Saskatoon, Saskatchewan Charles Dong - Vancouver, British Columbia Michael Einspenner - Kingston, Ontario Laura Holmes - Toronto, Ontario David Houlden - Ottawa, Ontario Nancy Lu - Toronto, Ontario Sharon McDonnell-Carline - Edmonton, Alberta

Susan Morris - Halifax, Nova Scotia Jonathan Norton - Edmonton, Alberta Roger Sarjeant - Toronto, Ontario Sherry Smith - Vancouver, British Columbia Samuel Strantzas - Toronto, Ontario

2012 CANM ASSOCIATE MEMBERS

Keith Aronyk - Edmonton, Alberta
Samdaye Chan - Regina, Saskatchewan
Nicole Dinn - Toronto, Ontario
Douglas Hedden - Edmonton, Alberta
Muhammad T. Imtiaz - Riyadh, Saudi Arabia
Paul Missiuna - Hamilton, Ontario
Tara Palmater - Burbank, California, USA
Francois Roy - Edmonton, Alberta
Gary Simon - London, Ontario
Chantal Turgeon - Gatineau, Quebec

2012 CANM HONORARY MEMBER INDUCTEES

Douglas Hedden, MD

Orthopedic Surgery, Alberta Health Sciences Edmonton, Alberta

David Rowed, MD

Neurosurgery, Sunnybrook Health Sciences Toronto, Ontario

*As of March 1, 2012.

Thank You

CANM INAUGURAL MEMBERS

Te extend our thanks to all inaugural members of CANM. CANM is the only professional association representing IOM practitioners in Canada, and your support and participation are vital to our organization. The executive board is committed to furthering the mission and vision of CANM and will remain dedicated to providing education, training, and certification for those working in the field.

Looking forward, CANM is in the process of developing educational modules encompassing various topics relevant to IOM. CANM is also investigating the possibility of offering these modules as online courses. The eventual goal is to use the modules as a pre-requisite for a future CANM credentialing examination. As discussed at the 4th Annual CANM IOM Symposium in Toronto, *full members* will be exempt from certain prerequisites for this future certification examination. To ensure you are eligible for these exemptions, be sure to maintain your membership status.

Thanks again for your support and contribution.

Laura M. Holmes, BScH, CNIM

Secretary-Treasurer, CANM

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Did You Know...?

CHOICE OF ELECTRODES IN THE OPERATING ROOM

Practitioners of IOM use surface electrodes, needle electrodes, or a combination of the two while monitoring. The type of electrode used often comes down to personal preference and old habits carried over from the neurophysiology laboratory.

Advantages of Surface Electrodes

- A larger surface area, resulting in a lower impedance and a theoretical decreased risk of electrical burn from a stray current (i.e., cautery)
- A lower risk of infection to both the patient and monitorist
- Durability, with little consequence of injury to the patient

Disadvantages of Surface Electrodes:

- Increased setup time
- Difficulty in balancing electrode impedances, resulting in poor signal quality
- Greater likelihood of current spread and bridging during stimulation

Advantages of Needle Electrodes

- Ease of use and faster setup times
- Quick and easy repositioning of electrodes
- Reduced signal noise with closely matched impedances
- Ability to place electrodes closer to nerves while stimulating
- Higher-quality intramuscular (electromyographic) recordings

Disadvantages of Needle Electrodes

- Increased risk of soft tissue injury
- Electrode failure or breakage resulting in higher risk to the patient
- Possible increased risk of cautery burn
- Increased risk of infection to the patient and all health care providers

Disposable and reusable options are available for both surface and needle electrodes. Reusing electrodes has obvious cost advantages and a decreased environmental impact: fewer electrodes are purchased, so fewer electrodes need to be thrown away. When choosing the reusable route, universal precautions and sterilization are a greater consideration, one that is even more pronounced when using needle electrodes. Thus, the decision to reuse electrodes must not be taken lightly or be made by a single individual. To ensure that standards and practices are upheld, procedures must be put in place and agreed upon by members of infection control, sterilization/processing, and administration as well as other members of the health care team. When reaching an informed decision, patient safety is always of utmost importance.

What is your perspective on surface versus needle electrodes? Send your comments to info@canm.ca – they may be published in the next issue of *Canadian IOM News*.

Roger Sarjeant, BScH, CNIM Nancy Lu, BScH, CNIM

Quick Poll

If the demand for neurophysiological monitoring exceeds the available staff/equipment, who decides which surgical cases receive monitoring at your institution?

- a. Chief of neurosurgery/surgical services
- b. Head of neurophysiological monitoring department
- c. Institution/hospital administration
- d. Consensus between conflicting surgeons
- e. Collaboration between two or more of the above
- f. Other



Highlights from the 2011 CANM IOM Symposium in Toronto

behalf of the CANM executive and symposium planning committee, I wish to thank all those who attended the 4th Annual CANM Intraoperative Monitoring Symposium on September 30 and October 1, 2011. I hope that you enjoyed your time in Toronto and found the meeting to be a stimulating educational and collegial affair. The success of the meeting was reflected by the overwhelmingly positive feedback we have received from the attendees.

Your participation has helped foster the growth of our association and supported the mission and vision of CANM. Education is, and will continue to be, a top priority for CANM.

As always, the case presentations were a highlight. The open discussions following each presentation were thought provoking and brought forth many suggestions for improvements and how to tackle difficult issues. Special thanks go out to the keynote speaker, Dr. Kartush, and our other guest lecturers who shared their experiences and expertise.

CANM is delighted to count you among our allies for the promotion of intraoperative neurophysiological monitoring in Canada. We give a special thank you to those who took a few minutes to fill out the CANM Survey 2011. The feedback we received through this survey and the CANM discussion portion of the meeting will be used to guide us as we work toward creating a formalized education program and eventually a credentialing process for practitioners of intraoperative neurophysiological monitoring.

I am looking forward to seeing you again, in Vancouver, British Columbia.

Laura M. Holmes, BScH, CNIM

Secretary-Treasurer, CANM 2011 Symposium Coordinator



Left to right: Symposium coordinator Laura Holmes with Marshall Wilkinson and Nancy Lu.



Left to right: CANM President David Houlden with keynote speaker Dr. Kartush.

CANM Milestones

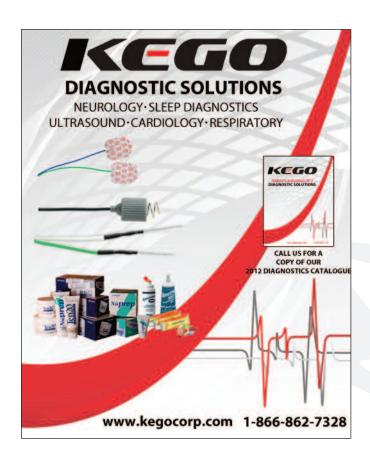
2008 TO THE PRESENT

 $ilde{r}$ e have plenty to commemorate since our inauguration in 2008. CANM began as a groundswell movement of IOM practitioners in Toronto, and over the past 5 years it has expanded into an incorporated association with established bylaws. CANM has hosted four successful symposiums attended by world-renowned leaders in our field. To connect our community from coast to coast, CANM launched an official website and newsletter, the first of their kind in Canada to be dedicated exclusively to IOM. In 2011, we opened our membership registration, attracting healthcare professionals from Canada and beyond. Since its introduction, our membership base has been enjoying a steady growth (Figure 1), a testament to the solidarity that exists within our community. As we move ahead in 2012, the CANM Executive Board has spent its best efforts to map an agenda dedicated to education. Online learning modules and certification will be at the core of this association, and we remain committed to serving all healthcare professionals with various levels of IOM experience.

Over the years, many people have helped us fulfill our vision of becoming the voice of IOM in Canada. CANM could not have accomplished so much if it were not for the support of our members, symposium attendees, and sponsors. The heart of CANM is our community, whose commitment and enthusiasm are second to none. Our association has such a bright future, and we hope you will join us for the many exciting developments yet to come.

Gina Bastaldo, BScH, CNIM

Communications Director, CANM



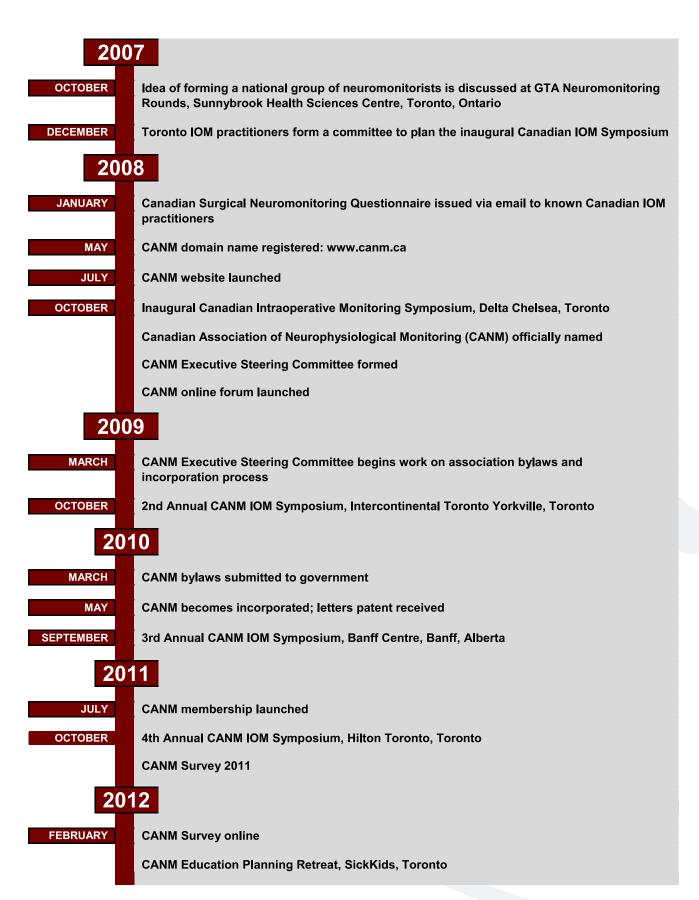


Figure 1. CANM timeline. (Courtesy of Laura M. Holmes, BScH, CNIM, Secretary-Treasurer, CANM)



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