

INTERVENTIONAL NEURORADIOLOGY 2011

Course Objectives

Participants will be able:

- to recognize the different causes of hemorrhagic and ischemic stroke and the indications of their treatment
- to recognize imaging characteristics and clinical presentation of head and neck vascular lesions and the role of embolization in their management
- to recognize imaging characteristics and clinical presentation of spinal vascular malformations, tumours and bone compression pathologies and their management strategies.

Accreditation

The Office of Continuing Education and Professional Development (CEPD), Faculty of Medicine, University of Toronto is fully accredited by the Committee on Accreditation of Continuing Medical Education (CACME), a subcommittee of the Committee on Accreditation of Canadian Medical Schools (CACMS). This standard allows the Office of CEPD to assign credits for educational activities based on the criteria established by The College of Family Physicians of Canada, the Royal College of Physicians and Surgeons of Canada, the American Medical Association, and the European Accreditation Council for Continuing Medical Education (EACCME).

Letters of accreditation/attendance will be available online following the course. Participants will be e-mailed information within two weeks after completion of the course specifying how to obtain their letter of accreditation/attendance online. We do not routinely mail out accreditation letters.

Electronic Syllabus

To ensure that participants receive the most up-to-date information from presenters, and to reduce the environmental impact of our meeting, a hard copy syllabus will not be printed. Conference participants will be presented with an electronic syllabus post conference. Course participants will be able to access recorded presentations on the CEPD Interventional Neuroradiology Symposium website.

Disclosure

Speakers will be requested to disclose to the audience any real or apparent conflict(s) of interest that may have a direct bearing on the subject matter of this program.

Greener Learning

The Office of CEPD promotes green meeting solutions in the delivery of our educational programs and events.

For Information

Office of Continuing Education and Professional Development
Faculty of Medicine, University of Toronto
500 University Avenue, Suite 650
Toronto, Ontario M5G 1V7

Tel: 416.978.2719

Toll free: 1.888.512.8173

Email: info-MIM1104@cepdutoronto.ca

Course Website: www.cepd.utoronto.ca/inr



Online Registration

To register online and pay by Visa, MasterCard or American Express, please visit the course website: www.cepd.utoronto.ca/inr

Receipts of Payment are issued by e-mail only.

Cancellation: Refunds will not be issued for cancellations received after **September 15, 2011**. A processing fee of \$40 will be retained on all cancellations. Requests for cancellation must be made in writing. Registrations are not transferable.

The University of Toronto reserves the right to cancel events. Registrants will be notified at the earliest possible date in the event of a cancellation. Registration fees for events cancelled by the University will be refunded; however the University will not be liable for any loss, damages or other expenses that such cancellations may cause.

Acknowledgements

We gratefully acknowledge the support of the following organizations:

The Royal College of Physicians and Surgeons of Canada, Region 3 Advisory Committee, has provided a continuing medical education grant in support of our meeting.

The David Braley and Nancy Gordon Chair in Interventional Neuroradiology

Accommodation

A limited block of rooms is being held at **The Renaissance Toronto Hotel Downtown**, One Blue Jays Way, Toronto - \$219.00 CAD (plus taxes) single/ double, \$25 per person for third/fourth person sharing. Please contact the hotel reservations department, stating "12th Annual Neuroradiology Symposium."

Rooms at the conference rate are available until the bedroom block fills or **September 2, 2011** whichever occurs first.

Please book early to avoid disappointment.

Phone: 416.341.7100 / 1.800.237.1512

Fax Reservations: 416.345.8733

For online reservations visit the course website: www.cepd.utoronto.ca/inr

The sale of rooms booked under the group conference rate help to offset conference expenditures. Thank you for reserving with the event group rate.

Fees (\$CAD)

Fees will be discounted an additional \$50 if attending all three days!

REGISTRATION CATEGORIES & FEES BY DAY(S)

PRE-CONFERENCE - SEPTEMBER 22

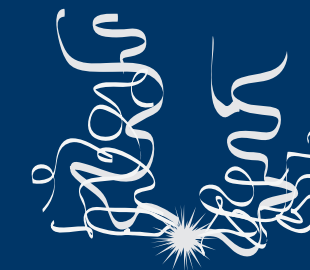
Physicians	\$150
Other Health Professionals	\$100
Out of Town Residents	\$100

2 DAYS (SEPT. 22-23 / SEPT. 23-24)

Physicians	\$350
Other Health Professionals	\$250
Out of Town Residents	\$250
Industry	\$400

3 DAYS (SEPT. 22, 23 & 24)

Physicians	\$450
Other Health Professionals	\$350
Out of Town Residents	\$350
Industry	\$500



Pre-Conference to the INR:

Functional Neurovascular Imaging

SEPTEMBER 22, 2011

Renaissance Toronto Hotel Downtown
Rogers Centre, 1 Blue Jays Way, Toronto, Canada

FNI Course Director

David J. Mikulis, MD
Professor & Co-Director,
Medical Imaging Research
Department of Medical Imaging,
University of Toronto
Toronto Western Hospital, UHN

FNI Co-Director

Rick Swartz, MD, PhD
Assistant Professor,
Division of Neurology,
Department of Medicine,
Director, University of Toronto Stroke Program
Sunnybrook Health Sciences Centre

Sponsored by:



12TH ANNUAL

Interventional Neuroradiology Symposium

SEPTEMBER 23-24, 2011

INR Course Directors

Karel terBrugge, MD, FRCPC
The David Braley and Nancy Gordon
Chair in Interventional Neuroradiology
Professor of Radiology and Surgery
Head, Division of Neuroradiology,
University of Toronto
Toronto Western Hospital, UHN

Timo Krings, MD, PhD, FRCPC
Professor of Neuroradiology
Toronto Western Hospital, UHN



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PRE-CONFERENCE - THURSDAY, SEPTEMBER 22

FUNCTIONAL NEUROVASCULAR IMAGING

OBJECTIVES - Participants will:

- Learn the pathophysiological basis of carotid vessel wall imaging, intracranial arterial wall imaging, and cerebrovascular reserve mapping.
- Understanding the imaging techniques available for functional assessment of cerebrovascular disease.
- Learn how to interpret vessel wall imaging and cerebrovascular reserve studies.
- Learn about new and emerging techniques.

7:30	Registration & Breakfast	1:00	Keynote Speaker
8:00	Welcome & Introductions		SAMMPRIS (Stenting vs. Aggressive Medical Management for the Prevention of Recurrent Intracranial Stenosis) Trial <i>Dr. Marc Chimowitz</i>
	SESSION I: Extracranial Wall Imaging		
8:05	Overview of Carotid Plaque Imaging <i>Dr. Bruce Wasserman</i>		
8:30	Intra-Plaque Haemorrhage <i>Dr. Alan Moody</i>		
8:55	Should We Operate on 'Active' Plaque Regardless of Stenosis? <i>Dr. Bruce Wasserman</i>	1:45	Role of the Endothelium in Regulation CBF <i>Dr. Charles Matouk</i>
9:20	Panel Discussion	2:10	Clinical BOLD MR Mapping of Cerebrovascular Reserve <i>Dr. Daniel M. Mandell</i>
9:40	Coffee Break	2:35	Neurovascular Uncoupling: Impact on the Brain <i>Dr. David Mikulis</i>
	SESSION II: Intracranial Wall Imaging & Vascular Permeability		
10:00	Overview of Intracranial Wall Imaging <i>Dr. David Mikulis</i>	3:00	Panel Discussion
10:15	Intracranial Vasa Vasorum <i>Dr. Renu Virmani</i>	3:20	Coffee Break
10:40	Clinical Implementation of Intracranial Wall Imaging: Why Do We Need It and How can We Use It? <i>Dr. Rick Swartz</i>		SESSION IV: Clinical Impact of Functional Neurovascular Imaging
11:05	ICH Expansion: Finding the Sweet Spot <i>Dr. Richard Aviv</i>	3:40	EC-IC Bypass <i>Dr. Michael Tymianski</i>
11:30	Panel Discussion	4:05	COSS (Carotid Occlusion Surgery Study) Trial <i>Dr. Colin Derdeyn</i>
11:50	Lunch Break	4:30	Panel Discussion & Closing Remarks
		4:50	Evaluation & Adjourn

INTERVENTIONAL NEURORADIOLOGY PROGRAM • SEPTEMBER 23-24

Each presentation will include five minutes for questions from the audience. Presentations will be designed to incorporate an audience response system.

FRIDAY, SEPTEMBER 23

7:15 **Registration & Continental Breakfast**

7:55 **WELCOME**
Dr. Timo Krings

STROKE 1
Moderator: *Dr. Timo Krings*

8:00 Acute Stroke in Children: The Canadian Experience
Dr. Gabrielle deVeber

8:20 Imaging of Acute Stroke in Adults: The Bottom Line
Dr. David Mikulis

8:40 Intra-Arterial Stroke Therapy: An Assessment of Demand and Available Work Force
Dr. David Kallmes

9:00 Mechanical Thrombectomy: Are Stent-Retrievers the Answer?
Dr. Mayank Goyal

9:20 Imaging and Management of Acute Carotid Occlusion
Dr. Richard Farb

9:40 Case Presentation: "Stroke" with Audience Participation
Dr. Timo Krings & Fellows

10:00 **Coffee Break with Exhibitors**

STROKE 2
Moderator: *Dr. Richard Farb*

10:30 One Year after CREST: Has the Dust Settled?
Dr. Frank Silver

10:50 Management Intracranial Stenosis: Lessons Learned
Dr. Timo Krings

11:10 Luminal Narrowing Conditions that Should Not Be Stented
Dr. Karel terBrugge

11:30 Case Presentations: Intracranial Luminal Narrowing with Audience Participation
Dr. Timo Krings & Fellows

12:00 **Lunch Break with Exhibitors**

ANEURYSM 1
Moderator: *Dr. Robert Willinsky*

1:00 Genetics of Aneurysms
Dr. David Kallmes

1:20 Pitfalls in Non-Invasive Imaging of intracranial Aneurysms
Dr. Ronit Agid

1:40 Management of Unruptured Asymptomatic Intracranial Aneurysms in the Elderly: Literature Review and Personal Experience
Dr. Chris Wallace

2:00 Coiling versus Clipping of MCA Aneurysms: Literature Review and Personal Experience
Dr. Gary Redekop

2:20 Case Presentations: "Aneurysms" with Audience Participation
Dr. Robert Willinsky & Fellows

3:00 **Coffee Break with Exhibitors**

ANEURYSM 2
Moderator: *Dr. Ronit Agid*

3:30 Management of Aneurysms Producing Oculomotor Symptoms: Coiling vs. Clipping: Literature Review and Personal Experience
Dr. Genevieve Milot

3:50 Management of Unruptured Aneurysms Presenting with Mass Effect: Reconstructive or Deconstructive?
Dr. Robert Willinsky

4:10 Toronto Experience with Flow Diverting Stents
Dr. Tom Marotta

4:30 Delayed Complications of Flow Diverting Stents: What Do We Know?
Dr. Kieran terBrugge

4:50 Case Presentations: "Aneurysms" with Audience Participation
Dr. Robert Willinsky & Fellows

5:15 **Adjourn**

Join us for an evening that promises great collegiality, dining and fun!

CONFERENCE DINNER - FRIDAY
Le Select Bistro, 432 Wellington St., West
Cocktails - 6:30 pm / Dinner - 7:15 pm

Dinner for this event is included in the cost of registration. Please RSVP at time of registration.

SATURDAY, SEPTEMBER 24

7:30 **Registration & Continental Breakfast**

SPINE VASCULAR 1
Moderator: *Dr. Timo Krings*

8:00 Classification of Spinal Vascular Malformations
Dr. Timo Krings

8:30 How Reliable is Non-Invasive Imaging of Spinal Vascular Lesions
Dr. Richard Farb

8:50 Spinal Dural AVFs: Management Strategies
Dr. Robert Willinsky

9:10 Spinal Perimedullary AVFs: Management Strategies
Dr. Karel terBrugge

9:30 Case Presentation: Spinal Vascular Diseases with Audience Participation
Dr. Karel terBrugge & Fellows

10:00 **Coffee Break with Exhibitors**

SPINE VASCULAR 2
Moderator: *Dr. Karel terBrugge*

10:30 Spinal Cord AVMs: Endovascular Approaches
Dr. Timo Krings

10:50 Parachordal Vascular Malformations
Dr. Karel terBrugge

11:10 Presurgical Embolization of Spinal Vascular Lesions
Dr. Donatella Tampieri

11:30 Surgery of Spinal Vascular Malformations
Dr. Mike Tymianski

12:00 **Lunch Break with Exhibitors**

SPINE PERCUTANEOUS
Moderator: *Dr. Kieran Murphy*

1:00 An Overview of Percutaneous Pain Management: Steroids, Alcohol, and Ozone
Dr. Kieran Murphy

1:20 An Overview of Vertebral Augmentation Procedures: Balloons, Cement, and Stents
Dr. Roger Smith

1:40 Vertebroplasty Does Not Work!
Dr. David Kallmes

2:10 Vertebroplasty Does Work!
Dr. Kieran Murphy

2:40 The Toronto Experience: Case Presentations with Audience Participation
Dr. Roger Smith

3:10 **Closing Remarks**
Dr. Karel terBrugge

3:15 **Evaluation & Adjournment**

INTERNATIONAL FACULTY

Functional Neurovascular Imaging

Marc Chimowitz, MBChB - *Keynote Speaker*
Professor of Neurology
Associate Dean of Faculty Development
Medical University of South Carolina
Charleston, SC

Colin Derdeyn, MD
Professor of Radiology, Neurology and Neurological Surgery; Program Director, Endovascular Surgical Neuroradiology
Mallinckrodt Institute of Radiology
Washington University School of Medicine
St. Louis, MO

Renu Virmani, MD
Clinical Research Professor
Department of Pathology
Vanderbilt University, Nashville, TN

Bruce Wasserman, MD
Associate Professor of Radiology
Director of Diagnostic Neurovascular Imaging
John Hopkins Hospital, Baltimore, MD

Interventional Neuroradiology

David F. Kallmes, MD
Professor of Radiology
Mayo Clinic, Rochester, MN

CANADIAN FACULTY

Interventional Neuroradiology

Mayank Goyal, MD, Calgary, AB
Genevieve Milot, MD, Quebec City, QC
Gary Redekop, MD, Vancouver, BC
Donatella Tampieri, MD, Montreal, QC

TORONTO FACULTY

* Faculty of Medicine, University of Toronto

Functional Neurovascular Imaging

Richard Aviv, MD*
Daniel M. Mandell, MD*
Charles Matouk, MD, PhD*
David J. Mikulis, MD*
Alan Moody, MBBS, FRCP, FRCR
Rick Swartz, MD, PhD*
Michael Tymianski, MD, PhD

Interventional Neuroradiology

Ronit Agid, MD*
Gabrielle deVeber, MD*
Richard Farb, MD*
Timo Krings, MD, PhD, FRCPC
Tom Marotta, MD*
David Mikulis, MD*
Kieran Murphy, MB, BCh, FRCPC, FSIR*
Frank Silver, MD
Roger Smith, MD*
Karel terBrugge, MD, FRCPC
Mike Tymianski, MD*
Chris Wallace, MD
Robert Willinsky, MD*