Course Objectives:

At the end of this event, participants should be able to:

- Describe and understand the management of anticoagulants during interventional radiology procedures and how to optimize periprocedural hemostasis
- Review the techniques involved with uterine fibroid and prostate artery embolization including what findings are relevant on pre-procedure and post-procedure imaging
- Identify and discuss the different appearances of malignancy post-interventional oncology procedures (embolization/RFA/cryoablation)
- Identify and discuss the different imaging appearances of vascular anomalies and soft tissue masses on multi-modality imaging
- Recommend different protocols for MR Angiography of vascular anomalies, AVF and soft tissue masses
- Review and discuss the morbidity and mortality associated with iliofemoral DVT and the radiologist’s importance in detecting these findings
- Review and discuss the reporting of Arterial doppler examinations
- Identify and relate what findings are important to the vascular surgeon when reporting CTA/MRA runoffs in the setting of AAA/TAA
- Describe and discuss the techniques involved with GI embolization with an emphasis on the important findings on pre-procedure and post-procedure imaging
- Apply to their daily practice “tips and tricks” for performing procedures and managing complications
- Review a broad spectrum of challenging cases
  » The CanMed roles being addressed in the course are Medical Expert and Scholar
## Schedule: Vascular and Interventional Radiology Update

*Note: Each 45-60 minute lecture contains 10 minutes of interactive Q&A using an ARS (audience response system) except for the Interactive Workshops, which are predominantly interactive using ARS.*

<table>
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<tr>
<th>Time</th>
<th>Session</th>
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<tr>
<td>07:00 – 07:30</td>
<td>Registration &amp; Hot Breakfast</td>
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| 07:30 – 07:45 | Welcome, Opening Remarks & Review of Course Objectives  
Dr. Giuseppe Tarulli, Dr. Vikas Agarwal & Dr. Joel Woodley-Cook |
| 07:45 – 08:30 | Update On Anticoagulants and Periprocedural Hemostasis Management  
Dr. Ziv Haskal |
| 08:30 – 09:15 | Women and Men: Imaging of Symptomatic Uterine Fibroids and Prostate Artery Embolotherapy for BPH  
Dr. Ziv Haskal |
| 09:15 – 10:00 | Interactive Workshop 1: Interventional Oncology: Emphasis On Post-Embolisation/RFA Imaging  
Dr. John Kachura |
| 10:00 – 10:10 | Q & A Session                                                                             |
| 10:10 – 10:25 | Morning Break                                                                             |
| 10:25 – 11:25 | Interactive Workshop 2: CTA/MRA Runoffs, AAA/TAA & Pre-Post EVR: What the Surgeon Wants to Know  
Dr. Graham Roche-Nagle |
| 11:25 – 12:10 | MRI Assessment of Vascular Anomalies and Soft Tissue Lesions  
Dr. Jeff Jaskolka |
| 12:10 – 12:20 | Q & A Session                                                                             |
| 12:20 – 13:10 | Lunch                                                                                    |
Dr. Jeff Jaskolka |
| 13:55 – 14:40 | Iliofemoral DVT: Imaging and Implications for Management  
Dr. Dheeraj Rajan |
| 14:40 – 15:25 | Arterial Doppler for the Diagnostic Radiologist  
Dr. Martin Simons |
| 15:25 – 15:35 | Q & A Session                                                                             |
| 15:35 – 15:50 | Afternoon Break                                                                           |
| 15:50 – 16:35 | Interactive Workshop 4: Tips and Tricks for Procedures and Managing Complications (Using ARS)  
Dr. Dheeraj Rajan |
| 16:35 – 17:00 | Interactive Case-Study Panel Discussion & Final Q & A Session  
All Speakers |

This program was developed in response to past OAR CME Evaluation Form Summaries and specific requests to the OAR office.
**Keynote Speaker**

**Ziv Haskal, MD, FSIR, FAHA, FACR**

Professor of Radiology and Editor-in-Chief, Journal of Vascular and Interventional Radiology, Department of Radiology and Medical Imaging/Interventional Radiology, University of Virginia School of Medicine

Dr. Haskal earned his medical degree at Boston University School of Medicine, MA, and completed a diagnostic radiology residency and interventional radiology fellowship at the University of California, San Francisco. He then joined the faculty of the University of Pennsylvania, and moved to build interventional services at both New York-Presbyterian Hospital/Columbia University Medical Center, and the University of Maryland. As professor and chief at both institutions, he established new interventional radiology (IR) admitting services and outpatient IR clinics, expanded clinical programs, and created successful research and training programs. He joined the University of Virginia faculty as a tenured professor in 2013.

An active researcher, Dr. Haskal has designed, led or participated in more than 40 clinical trials. He has published more than 400 scientific manuscripts, chapters, review, abstracts, and editorials in journals such as Radiology, JVIR, CVIR, Hepatology, Human Gene Therapy, New England Journal of Medicine, Circulation, etc. His research has spanned the breadth of IR, including research in TIPS and complex portal hypertension; preclinical validation and human transarterial gene delivery in one of the first human gene therapy trials; first demonstration of IR radiation eye injury risks at occupational levels; accelerated pharmacomechanical deep vein interventions; and advances in hemodialysis access care, embolization, and interventional oncology. He has given more than 500 invited lectures worldwide.

Dr. Haskal is the Editor-in-Chief of the *Journal of Vascular and Interventional Radiology, Gastrointestinal Intervention* and the previous Deputy Editor-in-Chief of *Cardiovascular and Interventional Radiology*. Dr. Haskal is a fellow of the American College of Radiology (ACR), the American Heart Association (AHA), the Society of Interventional Radiology (SIR), and the Cardiovascular and Interventional Radiological Society of Europe (CIRSE). He has served in many leadership positions, including the SIR Executive Council and the SIR Research Foundation Board. He chaired the 2007 SIR Annual Scientific Meeting, co-founded the GEST meeting, and co-chaired the 2005 AHA/ACC PAD Guidelines committee (cited >3000 times). He has received many national and international awards for innovation, leadership, service, and research excellence.

**Course Co-Directors**

**Vikas Agarwal, MD, CCFP, FRCPC**

Dr. Agarwal received his medical degree in 2004 at the University of Western Ontario. He subsequently completed a residency in family medicine the University of Toronto in 2006 after which he practiced family medicine in a variety of settings for four years. Subsequently, he completed a residency in diagnostic radiology in 2014 at the University of Toronto, followed by a fellowship in vascular and interventional radiology at the Joint Department of Medical Imaging at UHN/Mt. Sinai in Toronto in 2015. Dr. Agarwal practiced for two years at Niagara Health in Saint Catharines where he was instrumental in starting a program in Vascular and Interventional Radiology. He was also an Assistant Professor in Radiology at McMaster University and was the lead for undergraduate medical education. Currently, Dr. Agarwal practices a mix of diagnostic and interventional radiology with Ellesmere Xray Associates servicing the Scarborough, Ajax and Muskoka regions. Dr. Agarwal has special interests in hemodialysis access, radiology informatics and knowledge translation.

**Joel Woodley-Cook, MSc, MD, FRCPC**

Dr. Woodley-Cook received his medical degree in 2009 at University College Dublin in Ireland. He completed residency in diagnostic imaging at The University of Toronto in 2014 and fellowship in vascular and interventional radiology at the Joint Department of Medical Imaging at UHN/Mt. Sinai in Toronto in 2015. Dr. Woodley-Cook works in the department of Diagnostic Imaging at the Scarborough Health Network in Scarborough, Ontario. He serves as his department co-ordinator for the Diagnostic Imaging medical student selective rotation and holds a lecturer position at The University of Toronto. Dr. Woodley-Cook has an interest in endothelial cell biology and completed a Master’s Degree in vascular biology at McMaster University in 2004, which piqued his interest in the field of vascular medicine. He has special interests in hemodialysis access, peripheral arterial disease, and vascular anomalies, three areas that have a heavy presence in the Scarborough community.
Jeff Jaskolka, MD, FRCPC

Dr. Jeff Jaskolka completed his diagnostic imaging residency at The University of Toronto in 2006 and fellowship in vascular and interventional radiology at Yale University in 2007. He is a Clinical Adjunct Professor at The University of Toronto and a Staff Radiologist at Brampton Civic Hospital. Dr. Jaskolka is an examination board member and examiner in radiology for the Royal College of Physicians and Surgeons. He has had over fifty peer review publications and abstracts. Dr. Jaskolka is a reviewer for the Journal of Vascular and Interventional Radiology and one of the course organizers for the Cycling and Radiology Education in Europe (CREE) courses.

John Kachura, MD, FRCPC, FSIR

Dr. John Kachura completed his diagnostic imaging residency at the University of Toronto in 1994 and fellowship in vascular and interventional radiology at University Hospital and Boston City Hospital in Boston, Massachusetts in 1985. He is an Associate Professor in Medical Imaging at The University of Toronto and a Staff Radiologist in the Department of Medical Imaging at the Joint Department of Medical Imaging at UHN/Mt. Sinai in Toronto. Dr. Kachura is the vascular and interventional radiology Fellowship Supervisor at the Joint Department of Medical Imaging in Toronto and has co-authored over 60 peer-reviewed papers. Dr. Kachura was the President of the Canadian Interventional Radiology Association between 2011 - 2013. His professional and research interests include but are not limited to interventional oncology and obstetrical interventions.

Graham Roche-Nagle, MB, BCh, BAO, MD, MBA, FRCSI, MEd

Dr Graham Roche-Nagle is a native of Waterford, Ireland. He received his medical degree from the Royal College of Surgeons in Ireland in 1998 and finished his clinical training on the Irish Senior Registrar Training Program. He then completed a two-year fellowship in vascular surgery at Toronto General Hospital and St. Michael's Hospital Toronto. He is certified in general vascular surgery from the Royal College of Surgeons in Ireland and also holds certification from the European Board for Vascular Surgery.  Dr. Roche-Nagle has also been awarded a MBA in Healthcare Management (University College Dublin) and a Masters in Medical Education (Queen's University, Belfast). He is an Associate Professor in the Department of Vascular Surgery UHN. His specialty interests include open/endovascular abdominal and thoracic aortic aneurysm repair, peripheral artery bypass/intervention, carotid artery surgery, arterio-venous fistula construction, venous disease as well as thoracic outlet syndrome.  He is the lead of the Canadian Vascular Quality Initiative.

Dheeraj Rajan, MD, FRCPC, FSIR, FACR

Dr. Dheeraj Rajan completed his diagnostic radiology residency at Wayne State University in 1999 and fellowship in vascular and interventional radiology at the University of Pennsylvania in 2000. Over his career, he has published 100 research papers, 28 book chapters and one textbook on percutaneous dialysis interventions. He is a Professor and the Academic Head of VIR at the University of Toronto. Dr. Rajan has also developed the procedure for and been pivotal in the global commercialization of a device for percutaneous creation of dialysis fistulas. His current interests are but not limited to advanced arterial interventions, and percutaneous dialysis interventions. Dr. Rajan is a member of the committee tasked with the update of the Kidney Dialysis Outcomes Quality Initiative (KDOQI) guidelines

Martin Simons, MD, FRCPC, FSIR

Dr. Martin Simons completed his diagnostic imaging residency at the University of British Columbia in 1986 and fellowship in vascular and interventional radiology at The University of Toronto in 1987. He is an Assistant Professor in Medical Imaging at The University of Toronto and a Staff Radiologist in the Department of Medical Imaging at the Joint Department of Medical Imaging at UHN/Mt. Sinai in Toronto. Dr. Simons is one of the Founders of Interventional Radiology, as designated by the Royal College of Physicians and Surgeons of Canada. Dr. Simons has been awarded for his teaching prowess with numerous teaching awards, most recently in 2011. His professional and research interests include but are not limited to vascular anomalies, hemodialysis, prostate artery embolization, and bariatric embolization for morbid obesity.
Vascular and Interventional Radiology Update

Saturday, May 25, 2019

REGISTRATION
Includes course materials

- OAR Member: $425 (before April 25, 2019) $475 (after April 25, 2019)
- General Surgeons: $425 (before April 25, 2019) $475 (after April 25, 2019)
- Non-OAR Member: $675 (before April 25, 2019) $725 (after April 25, 2019)
- Radiology Residents and Fellows & General Surgery Residents and Fellows No Charge
- Related Specialists: $675 (before April 25, 2019) $725 (after April 25, 2019)
- Related Specialists Residents and Fellows: $50
- MRTs, Diagnostic Medical Sonographers, and Nurses: $350 (before April 25, 2019) $400 (after April 25, 2019)

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http://oarinfo.ca/cme

Access to archived versions of the CME program will be made available to all CME participants. Two archived formats will be available. Participants can choose to access the entire event or access the program on a lecture-by-lecture basis.

Instructions on how to access the archived CME program will be e-mailed to all participants (live program and webcast of the live program) as soon as they are available.

Archived versions of the CME are usually available within 7 to 14 days of the live event.

Cancellation policy:
For OAR members, if cancellation to this event is necessary, please contact the OAR office for assistance. For non-members, a refund will be made less a $50 processing fee, if cancellation is received in writing two weeks prior to the CME event date. No refunds will be given within two weeks of the CME event. The OAR reserves the right to cancel or move the conference should it become necessary. In this case, each registrant will be notified by telephone or e-mail and a full refund will be given. Therefore it is important that you provide us with an e-mail address and phone number. The OAR is not responsible for any other costs incurred.