

## OAR CBMD Accredited Densitometry Technologist (ADT) Course

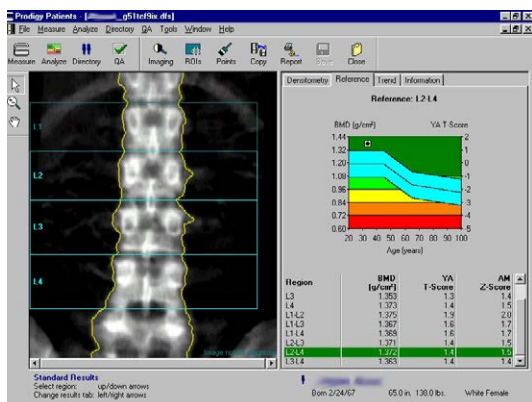
**Course Director: David Lyons, MD FRCPC**

"This course will be of interest to Medical Radiation Technologists providing BMD services."

**Join the hundreds of MRTs across Canada who have already earned their CBMD ADT designation!**



The Canadian Association of Medical Radiation Technologists has approved 11 Category "A" credits for full 1-day attendance/participation of this CME event, and is recognized by the CAMRT's provincial organizations and the American Registry of Radiologic Technologists (ARRT). Registrants can earn an additional 3 Category "A" credits by completing and returning an Optional Reflective Assignment.



### Overall Course Objectives:

**At the end of this event, participants through didactic lectures and workshops, should be able to:**

- Describe the fundamentals of radiation safety and quality control as it applies to DXA; the importance of quality assurance and quality control and elements of a QA/QC program for densitometry
- Discuss the vital role of the medical physicist in on-site and on-going quality assurance of equipment and technologists, and for the independent validation of results
- Develop knowledge and understanding of the critical importance of accreditation to facilitate BMD scans that are accurate, and which support the reporting physician in generating a report that accurately reflects patient's bone health
- Develop knowledge and understanding of the critical importance of implementing the Canadian Association of Radiologists' Technical Standards for Bone Mineral Densitometry Reporting 2013 as it applies to the performance of DXA
- Have an understanding of the complexities encountered in the performance and reporting of Paediatric DXA
- Identify the common errors encountered in the performance of DXA, as identified through the CBMD facility accreditation program to facilitate DXA scans that accurately reflect the patient's bone mass; identify common positioning mistakes; describe and demonstrate positioning techniques used to correct positioning errors and recognize and "Trouble-Shoot" unusual cases/situations
- Understand and demonstrate the technologist's responsibility for QA/QC within the facility and recognition of the importance of precision and why it is critical in determining the validity of interval change in bone mass
- Recognize the importance of a well-documented osteoporosis questionnaire that will allow the reporting physician to accurately report 10-year absolute fracture risk. (The technologist must have an understanding of the risk factors that lead to bone loss in men and women; the importance of fragility fractures and what a fragility fracture is; and knowledge of the treatment options for patients at high-risk for fracture.)



## SCHEDULE (Exam to be taken at a set date and time separate from the course.)

### NEW:

- All registrants (those participating “in-room” in Toronto and those participating via live webcast) will take an “online exam”
- **The online written exam will be at a set date and time separate from the course, which will be confirmed with all registrants in advance of the October 5th program.**
  - » This will provide participants with a break between the course and the exam and ensure that registrants have an opportunity to study the syllabus and any notes that they take during the program.

**Note:** Participants will be asked to submit written questions, however, there may still be one-on-one questions in the Q&A Sessions, which are also to be used to ensure that all webcast questions are answered in a timely fashion and not left to the end of the day.

### Saturday, October 5, 2019

07:00 – 07:30	<b>Registration &amp; Hot Breakfast</b>
07:30 – 07:35	<b>Welcome, Opening Remarks</b> <i>Dr. Giuseppe Tarulli</i>
07:35 – 08:15	<b>DXA Scanners: Principles of Operation &amp; Radiation Safety &amp; Quality Control</b> <i>Dr. Peter Raaphorst</i>
08:15 – 08:55	<b>Quality Control and Policies and Procedures: The Technologist &amp; The Physicist's Visit</b> <i>Dr. Peter Raaphorst</i>
08:55 – 09:50	<b>The Practical Application of Precision &amp; Interactive Q&amp;A</b> <i>Dr. David Lyons</i>
09:50 – 10:00	<b>Q &amp; A Session</b>
10:00 – 10:15	<b>Morning Break</b>
10:15 – 11:10	<b>Positioning Workshop &amp; Scan Acquisition</b> <i>Ms. Karen Lamadeleine &amp; Ms. Carrie Orr-Lusk</i>
11:10 – 11:45	<b>Pædiatric BMD: The Big Challenge of Little Bones</b> <i>Ms. Mandy Kohli</i>
11:45 – 12:40	<b>Technical Pitfalls In The Performance of DXA</b> <i>Ms. Karen Lamadeleine &amp; Ms. Carrie Orr-Lusk</i>
12:40 – 12:50	<b>Q &amp; A Session</b>
12:50 – 13:40	<b>Lunch</b>
13:40 – 14:10	<b>The Facility Accreditation Application</b> <i>Ms. Karen Lamadeleine</i>
14:10 – 14:50	<b>CAR Guidelines for the Performance and Reporting of Bone Mineral Densitometry</b> <i>Dr. Nimu Ganguli</i>
14:50 – 15:40	<b>The Osteoporosis Questionnaire &amp; the Importance of Fragility Fractures</b> <i>Dr. Ian Hammond</i>
15:40 – 15:50	<b>Q &amp; A Session</b>
15:50 – 16:05	<b>Afternoon Break</b>
16:05 – 17:30	<b>Basic Principles: Interactive Q &amp; A</b> <i>Dr. David Lyons</i>
17:30 – 17:45	<b>The ADT Practicum: What is Required &amp; What Not to Do!</b> <i>Ms. Carrie Orr-Lusk</i>
17:45 – 18:00	<b>Q &amp; A Panel Review: Answers to Submitted Questions</b> <i>All Speakers</i>

**Note:** Each lecture contains several minutes of interactive Q&A using ARS (audience response system) so every participant (in-room & live webcast) can test their knowledge levels, note areas for improvement and compare their responses against other registrants.



### David Lyons, MD, FRCPC

*OAR Medical Director, Facility Accreditation and OAR Medical Advisor, Continuing Medical Education Accreditation Programming*

Dr. David Lyons received his medical degree at Queens University at Kingston and training in diagnostic imaging at Toronto General Hospital, University of Toronto.

Dr. Lyons is the medical director for the Ontario Association of Radiologists' CBMD Facility Accreditation Program and a member of the medical advisory committee for that program.

As a radiologist involved in the reporting of DXA scans, he has a special interest in, and is a strong advocate for, quality assurance and quality control in the performance and reporting of Bone Mineral Densitometry.

He represented the CAR/OAR on the Osteoporosis Canada panel leading to the CAROC 2005 recommendations, which introduced the concept of 10-year absolute risk for fracture risk prediction, and later was the OAR representative on the panel updating fracture risk assessment to the CAROC 2010 fracture risk assessment tool.

Dr. Lyons pioneered the CBMD Facility Accreditation Program and has played a vital role in the OAR's continuing medical educational courses (CME) to support the Facility Accreditation Program.

Recognizing that technologists form the backbone of the accreditation process, he was instrumental in the development of continuing education programs for technologists and was responsible for developing the Accredited Densitometry Technologist (ADT) recognition for technologists who successfully complete an examination targeted to the accreditation process, and maintain continuing educational requirements set forth in the CBMD policies and procedures for accreditation.

Dr. Lyons has also promoted standardization in BMD reporting with development of a Report Builder workstation course that has been instrumental in supporting reporting physicians in achieving quality BMD reports required for Facility Accreditation.

## Speakers



### S. Nimu Ganguli, MD, FRCPC, ABNM

Dr. Ganguli is Director of Nuclear Medicine, William Osler Health Centre and Brampton Civic Hospital and is an Adjunct Lecturer, Department of Medical Imaging, University of Toronto. Previously he spent seven and one-half years as Site Director of Diagnostic Medical Imaging for the Brampton Civic Hospital.

Dr. Ganguli is a former member of the Canadian Association of Radiologists Board of Directors, a position he held for seven years. While with the CAR, he served on the CAR Board working group and was one of the authors of the national CAR Technical Standards for Bone Mineral Densitometry Reporting 2013. He also worked with Osteoporosis Canada on a Care Gap paper for assessing fractures on chest x-rays and other imaging studies that may relate to undiagnosed Osteoporosis.

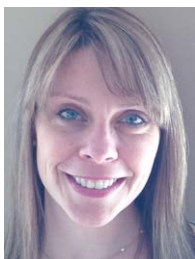
An avid proponent for facility accreditation, Dr. Ganguli is responsible for achieving OAR CBMD Facility Accreditation for two Independent Health Facilities (IHF sites) and one hospital.



### Ian Hammond, MD, FRCPC

Dr. Hammond is a staff radiologist at the Ottawa Hospital and Professor of Radiology at the University of Ottawa. He also practises at a number of community hospitals in the Ottawa Valley, reporting BMD at Winchester, Arnprior, Renfrew, and Barry's Bay.

Dr. Hammond is a recent past member of the Ontario Association of Radiologists' Board of Directors and a past President, and Gold Medal Winner, of the Canadian Association of Radiologists. He has been President of the Canadian Radiological Foundation since 2011.



### **Mandy Kohli, MRT (N), BASc, ADT**

Mandy Kohli is a Nuclear Medicine Technologist at the Hospital for Sick Children in Toronto. She is a graduate of the Michener Institute for Applied Health Sciences and received her Bachelor of Applied Science (Nuclear Medicine Technology) from Charles Sturt University. Ms. Kohli has worked at SickKids for 22 years and has been the Clinical Coordinator and the Charge Technologist for the BMD program for the last 11 years. As BMD Charge Technologist, Mandy is responsible for providing and overseeing all education for both students and staff and has implemented and sustained the BMD accreditation program. She has a keen interest in BMD research and was the primary investigator for a retrospective study comparing lateral DXA to radiography and a co-author in a study looking at the Influence of chronic recurrent multifocal osteomyelitis (CRMO) on densitometry measurements obtained by dual x-ray absorptiometry.

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### **Karen Lamadeleine, MRT (R), BA, CBDT, ADT**

Karen Lamadeleine has enjoyed a career as a Medical Radiation Technologist for more than 20 years and currently works at the Deep River and District Hospital. She is an Accredited Densitometry Technologist (ADT) and has been working with the Ontario Association of Radiologists since 2012 as a consulting technologist for the CBMD Facility Accreditation Program and the ADT Program. Ms. Lamadeleine also has a degree in Gerontology from McMaster University.

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### **Carrie Orr-Lusk, MRT (R), ADT**

Carrie Orr-Lusk has worked at Wentworth Halton X-ray and Ultrasound for 23 years performing general x-ray and mammograms. In 1999 she began performing BMD examinations. She later became responsible for QC and training within Wentworth Halton X-ray and Ultrasound. Today, Carrie is Director of Operations and Acting Executive Director. She has worked exclusively with Hologic systems and has joined the CBMD CME faculty to provide advice to MRTs working with Hologic equipment.

Ms. Orr-Lusk earned her Accredited Bone Mineral Densitometrist designation, when it was first introduced by the OAR CBMD Facility Accreditation Program and CME in 2010.

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### **Peter Raaphorst, PhD, FCCPM, PPhys**

Dr. Raaphorst is Professor of Physics, Carleton University; Professor of Radiology, Faculty of Medicine, University of Ottawa; Consulting Physicist Ontario Breast Screening Program and; Senior Consulting Physicist, OAR CBMD Facility Accreditation Program.

He is a Research Scientist engaged in biological sciences and in physics. His medical physics skills include radiotherapy, radiological imaging, quality assurance and radiation safety.

Dr. Raaphorst manages the CBMD Medical Physicists Program and has been a driving force behind ongoing CBMD policy and course development since the program began in 2007.

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## **OPPORTUNITY TO EARN ADDITIONAL CATEGORY “A” CREDITS**

All course participants have the opportunity to earn an additional three (3) category A Credits by completing and returning an Optional Reflective Assignment.

Each registrant will receive a copy of the assignment along with their syllabus material. The assignment is strictly optional, but must be completed within two weeks and emailed to the OAR office in order to receive the additional CME certificate for three category “A” Credits.





## The CBMD ADT Program and Exam

### There is no charge to write the exam and the exam is voluntary!

*Please note that the CBMD ADT exam for the Accredited Densitometry Technologist designation will now be available online for all “in-room” and all “live webcast” participants!*

**The written exam will not take place during the course, but at a separate date and time to be determined by the OAR. All course registrants will be advised of this date and time prior to the October 5th program. Registrants will also be provided with access instructions prior to the exam.**

The OAR CBMD Program adheres to the premise that there can be no accreditation without on-going education and that education to be effective and current, must continually evolve. Close to 500 MRTs across Canada, the majority of which are in Ontario, have earned their five-year ADT designation at least once since the program began in 2010.

The CBMD course offers technologists the opportunity to work with/learn from radiologists, medical physicists, and expert BMD MRTs in a formal continuing medical education setting. It also provides the opportunity for participants to ask questions of these experts, whether they are in the room, or participating by live webcast.

To earn the ADT designation, a technologist must write the ADT exam and achieve a minimum grade of 75 out of 100. Technologists who meet this requirement must then submit a practical exam and achieve a passing grade of 75 out of 100, or higher. Participants who pass both exam components will receive the 5-year ADT designation.

## The OAR CBMD Accredited Densitometry (ADT) Designation and The CBMD Facility Accreditation Program

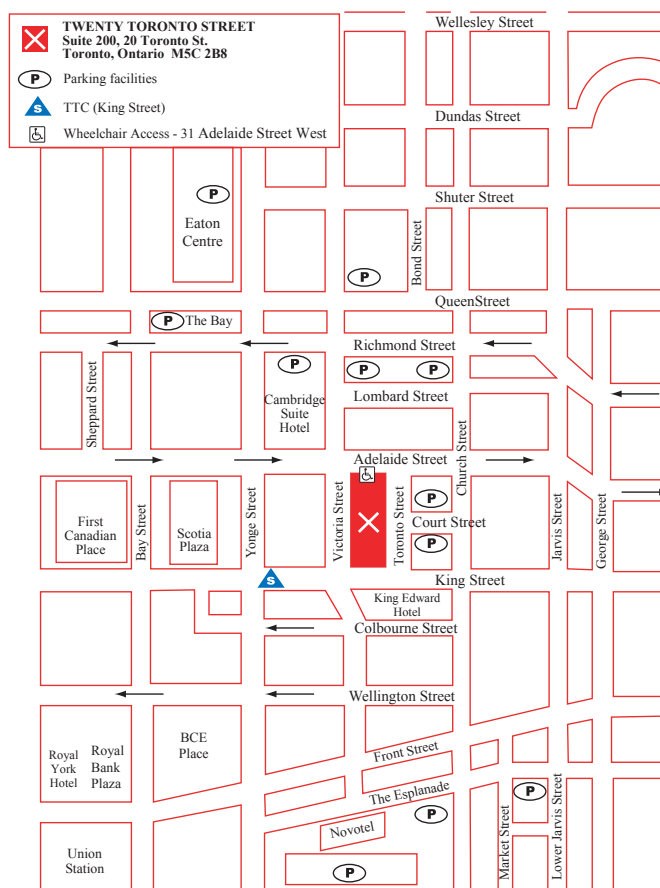
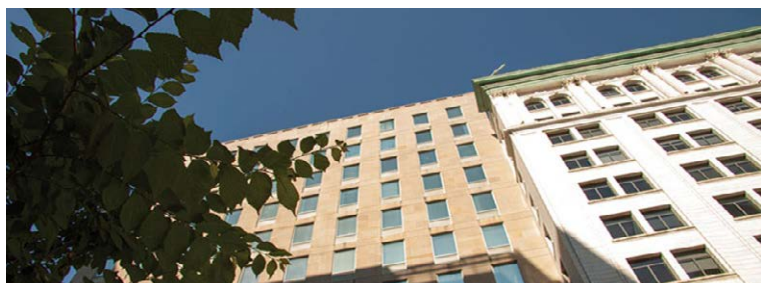


The CBMD ADT is NOT a certification designation. The five-year designation is for “Accredited Densitometry Technologist” and is important because it signifies that technologists who have earned the designation, meet the high standards set by the CBMD Program.

Certification programs do not address technologists’ QA/QC knowledge, practises and application. The CBMD facility accreditation program goes beyond certification and requires the highest standards for scanning, recording patient history, and all aspects of QA/QC, including precision studies, QA/QC policies and procedures, equipment maintenance, on-going CME etc. These are validated by a medical physicist and a CBMD technologist reviewer. Medical physicist validation is done during the physicist visit, which is an integral

part of the OAR CBMD Facility Accreditation Program. CBMD technologist reviewer validation is done during the accreditation process with a rigorous review of submitted patient studies, patient questionnaires and other relevant materials and is also addressed by a diagnostic radiologist reviewer as part of the overall approval process.

The CBMD ADT is a requirement for technologists working in OAR CBMD accredited facilities. However, since staffing changes are frequent and not all technologists can attend programs as regularly as one might like, it is understood that sites seeking accreditation will ensure that over time, all technologists working in BMD will earn their ADT designation and have their work supervised by an ADT until they do.



## Location:

Twenty Toronto Street  
Conferences and Events  
20 Toronto Street  
2nd Floor  
Downtown Toronto

## OAR CBMD Accredited Densometry Technologist (ADT) Course

### REGISTRATION

*Includes electronic course materials*

Technologists **\$350** (before September 30, 2019) **\$400** (after September 30, 2019)

**NOTE: There is no charge to write the CBMD ADT exam.**

### LIVE WEBCAST BROCHURE

Saturday, October 5, 2019



Please note that online registration for all OAR CME events is available at:

**[oarinfo.ca/cme](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. Delegates may substitute an alternate attendee. Please advise the OAR if any changes are made. 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.