



UNIVERSITY  
OF MANITOBA

Rady Faculty of  
Health Sciences

MASTERCLASS  
SERIES

# Cone Beam Radiology Technique and Interpretation Certification

Friday, April 5 – Sunday, April 7, 2019

112A Alpha Omega | Dr. Gerald Niznick College of Dentistry | 780 Bannatyne Avenue  
University of Manitoba | Rady Faculty of Health Sciences



Dr. Gerald Niznick College of Dentistry and School of Dental Hygiene

## COURSE OVERVIEW:

For general dentists and dental specialists alike, the emerging world of three-dimensional (3D) imaging can be an overwhelming, yet an exciting venture. Although incorporating this technology into the dental practice can prove to be a challenge, it can reward the practitioner with the advantages of visualizing regions of interest without distortion or superimposed anatomical structures.

This three-day certification course in cone beam computed tomography (CBCT), taught by University of Manitoba experts from oral and maxillofacial radiology, and radiation protection and imaging physics, is the only CBCT certification program taught within the province.

The program will include a didactic portion and a hands-on clinical portion that utilizes

the CBCT in the Ross McIntyre Digital Imaging Centre at the University of Manitoba, Dr. Gerald Niznick College of Dentistry. The didactic component will span Friday and Saturday, with both morning and afternoon sessions, and will thoroughly explore the principles of CBCT imaging technology. This broad scope of topics will educate the general practitioners and dental specialists in the realm of oral radiology and the use of the CBCT in their practice, as well as emphasize the responsibilities of the clinician inherent in utilizing this imaging modality. The Sunday morning session will encompass an interpretation seminar with discussion of patient cases. In the afternoon, the attendees will be split into two separate groups that will each gain experience exposing a CBCT image, as well as a mini-seminar on the manipulation of the images in third-party 3D software.

**This program will be of interest to both general and specialist dentists.**

**Participants must complete the entire 18-hour course to receive CDE certificate.**

**This course is limited to 10 registrants.**

**Prerequisites: None**

## LEARNING OBJECTIVES:

Upon completion of this course, participants will be able to:

- Integrate the principles of CBCT into their clinical dental practice.
- Apply the clinical indications for CBCT radiography and explore CBCT applications.
- Identify appropriate patient selection criteria and radiographic image prescription.
- Recognize the detrimental biological effects of ionizing radiation and weigh them against their benefits.
- Quantify radiation dosimetry.
- Implement patient preparation and safety.
- Select appropriate imaging protocols.
- Perform quality assurance procedures.
- Identify normal anatomy in CBCT.
- Recognize CBCT imaging artifacts.
- Perform a CBCT examination and utilize the 3D imaging software to review the case.
- Interpret CBCT images utilizing radiographic interpretation and explain the responsibilities of the clinical practitioner related to CBCT.



### **COURSE DIRECTOR & INSTRUCTOR:**

#### **Meredith Brownlee**

BSc, DMD, MDS, (OMFR), FRCD(C), Dip. ABOMR  
Assistant Professor;  
Division Head; Oral & Maxillofacial Radiology,  
Department of Dental Diagnostics and Surgical  
Sciences, Dr. Gerald Niznick College of Dentistry,  
Rady Faculty of Health Sciences,  
University of Manitoba



### **INSTRUCTOR:**

#### **Ingvar A. J. Fife, PhD, CRadP, CSci, MIPEM**

Head; Radiation Protection and Imaging Physics,  
Medical Physics, CancerCare Manitoba  
Adjunct Professor; Physics and Astronomy,  
Assistant Professor; Radiology,  
Max Rady College of Medicine,  
Rady Faculty of Health Sciences,  
University of Manitoba



### **INSTRUCTOR:**

#### **Idris Elbakri, PhD, MCCPM**

Imaging Physicist; CancerCare Manitoba  
Assistant Professor; Radiology,  
Max Rady College of Medicine,  
Rady Faculty of Health Sciences,  
University of Manitoba

**Dr. Meredith Brownlee** earned her DMD from the University of Manitoba in 2004 and launched her dental career by providing care for northern Indigenous peoples of Manitoba from 2004 to 2011 in numerous isolated communities. After seven years in private practice, Dr. Brownlee undertook her training in Oral and Maxillofacial Radiology at University of Connecticut, obtaining her Master of Dental Science in 2014. Dr. Brownlee joined the Dental Diagnostic and Surgical Sciences department of University of Manitoba as an Assistant Professor in 2014. She instructs undergraduate and graduate dental and undergraduate dental hygiene programs in the discipline of Oral and Maxillofacial Radiology. Dr. Brownlee conducts a part-time practice of Oral and Maxillofacial Radiology imaging referral service. Dr. Brownlee is a Diplomate of the American Board of Oral and Maxillofacial Radiology and is a Fellow of the Royal College of Dentists of Canada.

**Dr. Ingvar Fife** began his work as a medical physicist in 1978, with UK National Health Service and has been practising in Manitoba since 2005. He has comprehensive, considerable expertise in the fields of Radiation Protection and Diagnostic Imaging in healthcare. He currently is Head of the Radiation Protection and Imaging Physics groups in the Division of Medical Physics at CancerCare Manitoba. He has academic appointments as Adjunct Professor in Physics and Assistant Professor in Radiology, and has been most active in teaching at the University of Manitoba and previously in London (UK) with highlights contributing to radiology resident courses and post-graduate courses in radiation physics. His research interests include: radiation protection image quality and dose optimization in diagnostic radiology, computational simulation in diagnostic radiology, and radiation

protection in radiation and radionuclide therapy. He has the provincial appointment of Director under the Manitoba Radiation Protection Act (previously as Provincial Chief Inspector under Manitoba X-ray Safety Regulation 341/88R). Dr. Fife is also the Manitoba representative on the Canadian Federal Provincial Territorial Radiation Protection Committee.

**Dr. Idris Elbakri** earned his PhD from the University of Michigan in 2003 and worked in the medical imaging industry for 2 years before taking on his current position as an imaging physicist in the Department of Radiation Safety and Image Quality at CancerCare Manitoba. He is also an Assistant Professor in the Department of Radiology and an Adjunct Professor in the Department of Physics and Astronomy at the University of Manitoba. Dr. Elbakri is a member of the Canadian College of Physicists in Medicine. His clinical and technical interests span a wide of variety of x-ray imaging modalities, including CT and mammography. He is involved in the medical physics and radiology educational programs at the University of Manitoba and conducts research in radiological physics, image quality and dosimetry.



**Registration: 8:30AM**

**Lecture: 9:00AM – 4:00PM**

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**FEE: Dentist \$2,490**

Breakfast and lunch provided

**REGISTRATION DEADLINE: March 22, 2019**

**ONLINE REGISTRATION: [cpd-umanitoba.com](http://cpd-umanitoba.com)**

#### **ACCESSIBILITY:**

The University of Manitoba is committed to accessibility for persons with disabilities. To request accommodations, contact Laura Friesen in advance of the program at [Laura.Friesen@umanitoba.ca](mailto:Laura.Friesen@umanitoba.ca).

#### **DISCLOSURE OF CONFLICTS OF INTEREST:**

In keeping with accreditation guidelines, instructors participating in our programs are required to disclose to the audience any involvement with industry or other organizations that may potentially influence the presentation of the educational material.



#### **DISCLAIMER:**

The information presented in continuing education courses offered at the University of Manitoba are for educational purposes and not intended to supersede the professional judgement of participants in rendering patient care. Participants are cautioned about the dangers of incorporating techniques and procedures into their practices without adequate clinical experience.

Institutions of dental education have an obligation to disseminate new knowledge and training related to dental practice. Some courses may include controversial materials, philosophies of practice, or commercial references. When a company sponsors a continuing dental education course at the University of Manitoba, this does not imply that the University of Manitoba endorses a particular philosophy, procedure or product.

#### **REFUND POLICY:**

If written or verbal notice of withdrawal is received from a registrant fourteen (14) days or more prior to the date of the event, the registration fee, less an administrative fee of \$230, will be refunded.

The University of Manitoba reserves the right to cancel or postpone any educational program due to an insufficient number of registrations. The decision to cancel will normally be made at least fourteen (14) days prior to the program date. Each registrant will be notified by email and provided with a full refund of all registration costs. The University of Manitoba is not liable for any loss, damages or other expenses that such cancellations may cause, including, but not limited to, non-refundable airline fares, hotel penalties or lost income.

#### **STUDY CREDITS**

This course is designed for **18 hours** of Continuing Dental Education Credits.



Rady Faculty of Health Sciences,  
University of Manitoba  
Nationally Approved PACE Program  
Provider for FAGD/MAGD credit.  
Approval does not imply acceptance  
by any regulatory authority or AGD  
endorsement.

The current term of approval extends from July 1, 2018 to June 30, 2022.  
Provider ID# 214210



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**Nancy Auyueng, DMD, BSc**  
Director – CPD Dentistry & Dental Hygiene  
Office of Continuing Competency and Assessment  
Rady Faculty of Health Sciences, University of Manitoba  
[Nancy.Auyeung@umanitoba.ca](mailto:Nancy.Auyeung@umanitoba.ca)

#### **CONTACT:**

**Laura Friesen**  
Program Coordinator – CPD Dentistry & Dental Hygiene  
Office of Continuing Competency and Assessment  
Rady Faculty of Health Sciences, University of Manitoba  
Phone: 204-789-3562 Fax: 204-272-3126  
Email: [Laura.Friesen@umanitoba.ca](mailto:Laura.Friesen@umanitoba.ca)