

SMALL-FIELD CONE BEAM CT: Principles and Applications

Program Details

DATE	Saturday May 23 & Sunday May 24, 2026
TIME	8:00 am - 8:30 am Registration & Breakfast 8:30 am - 4:30 pm Lecture & Lunch
LOCATION	Delta Hotel Regina 1919 Saskatchewan Drive, Regina, SK
TUITION	\$1,595 + GST
CREDITS	16 CE Credits

Cancellation Policy: Cancellations by the participant within 7 days of the program will result in a fee of 50% of the tuition cost. No shows will be charged the entire regular tuition price. If CDSS cancels the program, the participant will be reimbursed the full tuition amount.

Course at-a-Glance

The small field-of-view cone beam CT (CBCT) course has both didactic and “hand’s on” components that will introduce the clinician to the principles of CBCT and its applications in dentistry consistent with regulatory education requirements for the operation of small field-of-view CBCT systems (defined as field sizes of ≤ 8 cm). The course emphasizes radiation protection, the interpretation of diseases and disease processes arising in the oral and maxillofacial region, and computer skills associated with image processing.

Participants will be able to:

- Discuss the limitations of cone beam CT imaging.
- Use a systematic strategy to review a cone beam CT imaging volume.
- Discuss the impact of x radiation on biological systems, and compare and contrast radiation doses from 3D image volumes with conventional dental radiographs.
- Identify normal radiographic anatomy in 3D image volumes.
- Employ a systematic methodology for describing and analyzing abnormalities of the jaws.
 - Compare and contrast the radiographic features of inflammatory and malignant lesions of the jaws.
 - Describe the radiographic features of:
 - tooth and bone fractures;
 - benign space-occupying lesions (cysts and benign tumours) in the jaws;
 - dysplastic abnormalities of bone.
 - Describe the importance of cross-sectional imaging in pre-operative implant diagnosis.
 - Describe the common anomalies of the temporomandibular joint.
- Report cone beam CT volumes.

Important - PLEASE READ

The course assumes that each participant has competency in the following computer skills; downloading files, installation and troubleshooting of software installation and mouse “point-and-click” skills. Participants are required to bring a PC laptop computer purchased within the last 4 years with 1 functional USB port, a video card and at least 4 GB RAM. As well, participants should have a version of Adobe Acrobat Reader on their laptop computer in order to display .pdf files. The image viewing software we will be using is ONLY compatible with PC-based computers unless Windows™ parallels has been installed on your Apple™ computer.

There will be a 2 hour knowledge and case-based test on a date and time that will be agreeable to all participants. The test will consist of short answer questions, the identification of normal anatomy and reports of 2 CBCT volumes. The passing grade is 60%.

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Speaker



Dr. Ernest Lam

Professor Ernest Lam is a full-time, tenure, full professor in oral and maxillofacial radiology in the Faculty of Dentistry at the University of Toronto. Dr. Lam completed D.M.D. and M.Sc. degrees at the University of British Columbia, and spent 2 years in general practice dentistry in Vancouver before moving to the University of Iowa where he completed a Certificate in Oral and Maxillofacial Radiology and a Ph.D. in Radiation Biology. Professor Lam is also a Fellow of the Royal College of Dentists of Canada in Oral and Maxillofacial Radiology and a Diplomate of the American Board of Oral and Maxillofacial Radiology.

Schedule

Saturday, May 23, 2026

8:00 - 8:30 am	Registration and Breakfast
8:30 - 10:15 am	CBCT image acquisition and processing
10:15 - 10:30 am	Break
10:45 - 12:00 pm	Dental implant treatment planning
12:00 - 12:45 pm	Lunch
12:45 - 1:45 pm	Radiation biology and protection
1:45 - 2:00 pm	Break
2:00 - 3:30 pm	Normal anatomy and variations
3:30 - 4:30 pm	Dento-alveolar and mandibular trauma

Sunday, May 24, 2026

8:00 - 8:30 am	Registration and Breakfast
8:30 - 10:30 am	Principles of image interpretation
10:30 - 10:45 am	Break
10:45 - 12:00 pm	Alterations to the architecture of bone
12:00 - 12:45 pm	Lunch
12:45 - 2:15 pm	Benign space-occupying lesions
2:15 - 3:00 pm	Inflammation and malignant neoplasia
3:00 - 3:15 pm	Break
3:15 - 3:45 pm	Temporomandibular joint
3:45 - 4:30 pm	Reporting

Post Course

2 hour knowledge and case-based test on a date and time that will be agreeable to all participants.

Please send any questions to kaci@saskdentists.com.

Recommended text

Lam EWN, Mallya SM. Oral Radiology: Principles and Interpretation (9th Ed.), Elsevier, 2026.

By registering for this course, you agree to share your email address with Dr. Ernest Lam for the purpose of exam distribution.