CONE BEAM (CT) in Banff
Certification Program for Dentistry

COURSE DATES
February 7-8, 2020
Plus 8 hour online prerequisite component

CE CREDITS
21 Credits

COURSE FEES
$1,295.00

LOCATION
Fairmont Banff Springs Hotel

REGISTER ONLINE AT: www.dentistry.ualberta.ca/CDE

COURSE OUTLINE

With the introduction of Cone Beam CT (CBCT) in dentistry is the responsibility for adequate training and education on its utilization to both maximize its diagnostic and therapeutic potential while considering the risk benefit of ionizing radiation to patients. This course is aimed at preparing attendees for CBCT utilization and/or ownership. It will provide fundamentals of diagnostic imaging as well as clinical guidelines. A workshop component allows dentists to obtain “hands on” training with the software and become competent in common applications such as measurement of bone height and width for implant planning, examination of the temporomandibular joints and visualization of impacted teeth. The course culminates with a multiple choice examination.

1. FUNDAMENTALS OF IMAGING, RADIATION DOSIMETRY, CLINICAL GUIDELINE
   Topics include radiologic physics, interaction of x-rays and biologic matter, evolution of dental imaging, measures of specificity and sensitivity, radiation dosimetry, risk benefit, fundamentals of CBCT, differences between devices, device settings, operational parameters, software for visualization, craniofacial anatomy, clinical applications and strategies for imaging and radiologic interpretation and reporting.

2. WORKSHOP INVOLVING IMAGE ACQUISITION AND INTERPRETATION
   Selected cases, such as implant planning, temporomandibular joint examination, airway analysis, and impacted teeth will be provided to demonstrate application of the above fundamentals with emphasis on visualization strategies and radiologic interpretation. Course attendees will be provided sample cases to demonstrate their understanding and proficiency. The image results and radiologic interpretation will be graded to document competency. Participants will be required to carry a fully charged laptop.
3. EXAMINATION
Following the course and workshop, a multiple choice examination is administered. A score of 80% or higher will be needed to satisfactorily complete the certification.

4. EDUCATIONAL GOALS
At the conclusion of this course attendees will: Understand the basic fundamentals of cone-beam CT technology, principles of operation, need for multi-dimensional imaging and comparisons to conventional imaging devices; Understand the effect of ionizing radiation on biologic matter, radiation dosimetry, radiation hygiene and strategies to reduce effective absorbed dose to the patient; Become familiar with radiographic craniofacial anatomy and variations; Understand clinical indications for CBCT and be able to prescribe appropriate operational parameters for imaging; Be able to utilize computer software to visualize CBCT images and select appropriate methods of visualization; Be able to provide a basic interpretation and report of CBCT images; Be prepared for installation.

SPEAKERS

DR. JAMES MAH, DDS, MSC, DMSC
Dr. James Mah is a Clinical Professor and the Program Director in Orthodontics at the University of Nevada, Las Vegas. His research is focused on 3-Dimensional imaging and modeling for the purposes of diagnosis, treatment planning and therapeutics as well as anthropology and forensics. He has been involved in the research and development of 3-D facial imaging devices, intra-oral scanners, CAD/CAM applications in dentistry and cone-beam CT scanners. He obtained his Doctorate of Dental Surgery, Master of Science degrees and his Certificate of Specialization in Orthodontics from the University of Alberta. Following he graduated from Harvard Medical School with a Doctorate of Medical Science degree and completed a Post-Doctoral Fellowship in the Department of Orthopaedics at Children’s Hospital, Boston. Dr. Mah has authored numerous publications, textbooks, and book chapters and regularly presents nationally and internationally. In addition, his work has been featured in the Los Angeles Times, The National Post, Tech TV and Men’s Health. He also reviews for the Journal of Clinical Orthodontics, the American Journal of Orthodontics & Dentofacial Orthopedics and other dental journals.

DR. SHAWNEEN GONZALEZ, DDS, MS, Diplomate ABOMR
Dr. Gonzalez has received her dental degree from the University of Washington School of Dentistry, Seattle, Washington, and her oral and maxillofacial radiology certificate and M.S. in Stomatology from the University of Iowa College of Dentistry, Iowa City, Iowa. She is a Diplomate of the American Board of Oral and Maxillofacial Radiology. She is in private practice, and is the the creator of an informational oral radiology website (http://drstoothpix.com) where she educates other dental professionals around the world. She was previously the Director of the Oral and Maxillofacial Radiology Clinic at Oregon Health & Science University School of Dentistry and University of Nebraska Medical Center College of Dentistry. She is a member of the American Association of Oral and Maxillofacial Radiology, American Board of Oral and Maxillofacial Radiology, American Dental Education Association and the American Dental Association. She also serves on the pre-doctoral committee for the American Association of Oral and Maxillofacial Radiology.