



**IMAGING
INSTITUTE**
POWERED BY I-CAT®

Successful Implementation and Utilization of Cone Beam 3-D Imaging in Your Practice

3-D Imaging Institute

Continental breakfast and lunch will be served each day to facilitate networking with your peers.

COURSE SCHEDULE – DAY ONE

MORNING:

8:00-8:30 am

Gathering

During this time lecturers and participants get to know each other.

8:30-9:00 am

Radiation Biology

This section will review quantities of radiation in natural and man-made environments to demonstrate the quantity of radiation of cone beam computer tomography emitted relative to other forms of radiation. Also, a short synopsis of the affect radiation has on human tissue (cellular level). Including stochastic and nonstochastic effects.

9:00-9:30 am

Radiation Physics

This section will review the physics of cone beam computed tomography compared to other imaging modalities. Similarly, differences in medical computer tomography and cone beam computer tomography will be discussed as well as imaging modalities that do not use radiation such as magnetic resonance imaging.

9:30-11:30 am

Anatomy and MPR Image Review

This section will illustrate normal anatomy in axial, coronal, and sagittal images within the oral and maxillofacial complex including the paranasal sinuses.

11:30 am-12:00 pm

Questions

LUNCH:

12:00 – 1:00 pm

1:00-4:00 pm

Reviewing of Data

This section will focus on recognizing anatomy that is not normal. Emphasis will be placed on being able to recognize radiographic signs for cysts, benign lesions, and malignant lesions. Emphasis will not be on learning specific pathologic entities but on learning to refer a volume of data for review when appropriate. In addition, emphasis on image quality and reasons for image degradation will be discussed as well as how data should be manipulated to obtain desired measurements. Finally, importance of creating a sound foundation using CBCT data will be reviewed.

4:00-4:30 pm

Insurance and Legal Issues

This section will focus on our experience with medical insurance patient reimbursement and the appropriate codes used for reimbursement. Finally, legal issues surrounding cone beam computer tomography will be discussed, how missed pathology can be avoided, and how different states are treating this issue.

4:30-5:00 pm

Questions



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COURSE SCHEDULE – DAY TWO

MORNING:

- 8:00-8:30 am Questions and comments from the previous day will be discussed.
- 8:30-9:00 am *Networking Data*
This section will focus on maximizing networking possibilities for storage and review of data volumes.
- 9:00-11:30 am *i-CATVision™ and 3DVR Software Review*
In this section the attendant will learn to scroll through a volume of data using the i-CATVision™ imaging software followed by learning to draw an image layer emphasizing the importance of creating a correct panoramic curve image and correct temporomandibular joint image layers. A discussion of the effect of altering the orientation of axial, coronal, and sagittal views on the panoramic curve will take place.
- 11:30 am-12:00 pm *Questions*

LUNCH:

12:00 – 1:00 pm

- 1:00-3:30 pm *Third-party DICOM Compliant Software*
In this section we will review third-party softwares. Review of the software environment will be explored as well as a demonstration of examples how SimPlant and other software's are used in addition to dental implant presurgical planning. Finally, the importance of Study (Report) creation will be discussed including Tier 1 (Referral Works Studies) versus Tier 2 (SimPlant Studies, etc.).
- 3:30-4:30 pm **Guest Lecturer*
A guest lecturer will illustrate how DICOM data has transformed his practice to a level of predictable dental implant placement and one-on-one communication with restorative dentists. (**More than one guest lecturer may occur and times may vary depending on their availability.*)
- 4:30-5:00 pm *Questions*

Throughout the two days the attendants will have access to Carolina OMF Imaging to experience the use of the i-CAT® in an imaging center environment. The attendant will receive a notebook with an overview of the information conveyed over the two days.

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3-D Imaging Institute

Raleigh, North Carolina

RADIATION BIOLOGY.....page ONE

Radiation Biology

Types of Radiation

Effects of Radiation

Radiation Sources

RADIATION PRINCIPLES and PHYSICS.....page NINE

What is CBCT

How CBCT Works

RADIOGRAPHIC INTERPRETATION.....page TWELVE

Inflammation

Cysts

Benign Tumors

Malignant Lesions

Bone Dysplasia

Temporomandibular Joint

Paranasal Sinuses

Soft Tissue Calcifications

Others

TREATMENT PLANNING USING CBCTpage TWENTY-SIX

SOFTWARE REVIEW.....page TWENTY-SEVEN

DIAGNOSIS CODESpage TWENTY-EIGHT

ANATOMICAL CHECK-LIST..... page TWENTY-NINE