The IAMI TMD and Sleep Dentistry Series is a structured learning experience created to provide the clinician with core TMD/Sleep dentistry imaging knowledge. Each course builds the foundation of knowledge for the following course.

**TMD Imaging Level 1** explores the interaction between the TMJ and upper respiratory tract, and aims to help the participant understand these structures and their interactions, and how abnormality in one can lead to abnormality in the other. Normal CBCT anatomy as it pertains to TMD diagnosis and airway analysis for sleep dentistry purposes will be reviewed as well as MRI evaluation of the normal TMJ. This intensive two-day course gives the participant the foundational knowledge for CBCT evaluation and aids in identification of abnormal by presenting normal anatomy and biomechanics.

**Specific Objectives**

- To familiarize the participant with the normal anatomy of the major contributors to TMD, orofacial pain and obstructive sleep apnea.
- To create radiographic correlates to the anatomical structures mentioned above.
- To teach the participant to navigate through a CBCT volume identifying the relevant anatomy.
- To increase comfort with evaluating TMJ MRIs
- To correlate the anatomy and the biomechanics and physiology of the TMJ and airway.

This continuing education activity has been planned and implemented in accordance with the standards of the ADA CERP through joint sponsorship between Big Sky Seminars and Beam Readers.

Big Sky Seminars designates this activity for 15 hours continuing education credit.

ADA CERP is a service of the American Dental Association to assist professionals in identifying quality providers of continuing dental education. ADA CERP does not approve or endorse individual courses or instructors, nor does it imply acceptance of credits hours by Boards of Dentistry.

BeamReaders receives no commercial support for this course.

Concerns or complaints about a CE provider may be directed to ADA CERP at [www.ada.org/goto/cerp](http://www.ada.org/goto/cerp).
Outcomes for TMD Imaging, level 1

- Learning to identify normal radiographic anatomy will increase identification of radiographic abnormalities.
- Understanding how the anatomic structures correlate to function and dysfunction will improve treatment outcomes.
- Increased familiarity with advanced imaging techniques will enhance utilization of these techniques to reach the correct diagnosis.

Description of teaching methods: lecture, hands-on and demonstration.

This course is a two day, hands-on course with audience response system (clickers). The day of the course, the participants will be requested to bring their own laptops with their familiar DICOM viewing software installed, as well as an external scroll mouse. An anonymized patient’s CBCT scan (16cm field of view) will be distributed. The instructors will show graphic representations of each anatomic structure being reviewed, pausing after each one to show the participants how to find the structure on the patient’s scan. Normal anatomic MRI appearance of the TMJs will be discussed. Biomechanics of the TMJ and physiology of the upper respiratory tract will be covered.

Dr. Dania Tamimi, BDS, DMSc:
Dr. Tamimi earned her dental degree from King Saud University, Riyadh, Saudi Arabia in 1999. She trained at Harvard University and earned a doctorate of medical science (DMSc) and certificate of fellowship in Oral and Maxillofacial Radiology in 2005. She is board certified by the American Board of Oral and Maxillofacial Radiology (ABOMR).

Dr. Tamimi is a reviewer and an Editorial Board member for Oral Surgery, Oral Pathology, Oral Medicine and Oral Radiology (OOOO), and a reviewer for several other dental and medical Journals. She is a co-author on “Diagnostic Imaging, Oral and Maxillofacial”, the lead author on “Specialty Imaging: Dental Implants”, and “Specialty Imaging: Temporomandibular joint”. She currently runs her oral radiology private practice in Orlando, Florida.

Dr. Shaza Mardini, DDS, MS:
Dr. Mardini received her D.D.S. degree from the University of the Pacific Arthur A. Dugoni School of Dentistry in 2001. In 2002 she began a 3 year residency in Oral and Maxillofacial Radiology at the University of Texas Health Science Center at San Antonio. There Dr. Mardini received her M.S. degree and Oral and Maxillofacial Radiology Certification. Following her graduation in 2005, Dr. Mardini joined the faculty at Boston University Goldman School of Dental Medicine as a Clinical Assistant Professor. She spent time teaching in both the Radiology and Emergency Clinics as well as being Course Director for the first year dental radiology course. In 2006 Dr. Mardini was awarded Diplomate status with the American Board of Oral and Maxillofacial Radiology. Dr. Mardini is currently in private practice.
Day I: Understanding TMJ/Airway relationship and Radiographic anatomy of TMJ and TMD related structures

8:00-8:30  Introduction.
8:30-10:30  Understanding and Imaging the interaction between the TMJ and the upper respiratory Tract

10:00-10:15  Break

10:15-11:15  TMJ Anatomy (CBCT and MRI analysis)
11:15-12:00  Anatomy of Maxilla and Mandible.

12:00-1:00  Lunch

1:00-1:45  Anatomy of Temporal Bone.
1:45-2:30  Anatomy of the Skull Base.
2:30-3:15  Anatomy of the Cervical Spine

3:15-3:30  Break

3:30-5:00  TMJ Biomechanics.

Requirements

Please bring your own laptop with a DICOM viewing software installed. If you do not have a DICOM viewing software, please contact tom@beamreaders.com in advance to help you in obtaining a free 30-day trial of Anatomage. No instruction will be given in the utilization of the DICOM viewing software, so familiarity with the software is recommended prior to the course. If the participant does not have a laptop with the software installed, the participant can follow along the main screen or with a neighboring participant. However, we do believe in the value of the hands-on experience, so your own personal laptop is recommended.


**Day 2: Radiographic anatomy of the upper respiratory tract.**

8:00-9:00 Nasal cavity.
9:00-10:00 Paranasal sinuses
10:00-10:30 Post-ENT surgical changes

10:30-10:45 **Break**

10:45-11:45 Tongue and Floor of the mouth
11:45-12:15 Muscles of the neck, postural analysis

12:15-1:15 **Lunch**

1:15-2:15 Nasopharynx and Oropharynx
2:15-3:15 Hypopharynx, Larynx/esophageal opening

3:15-3:45 **Break**

3:45-5:00 Physiology of the upper respiratory tract and airflow

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**Recommended reading**

Specialty Imaging: Temporomandibular Joint, Tamimi and Hatcher, Elsevier 2016

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For more information, please visit beamreaders.com/education, email iami@beamreaders.com, or call 916.771.3505