



**2015 Endodontic Board Review and Scientific Update
Schedule
University of Missouri-Kansas City**

DAY 1: Friday, March 27, 2015

7 a.m. *Registration and Breakfast*

7:45 a.m. *Welcome*
Dr. Randy Todd, Director, Board Review Course
Dr. Ken Spolnik, COD President
Dr. Ken Frick, UMKC, Director of Endodontics
Dr. Garry L. Myers, Secretary of the American Association of Endodontists

8:30 a.m. *Endodontic Diagnosis*
Dr. Louis Berman
Learning Objectives:

- Describe the various types of pulpal and periodical diagnostic terminologies.
- Describe the various types of diagnostic tests.
- Understand the various clinical and radiographic appearances of root fractures.

Disclosure: *Dr. Berman has no past or present proprietary or relevant financial relationship or receive gifts in kind (including soft intangible remuneration), consulting position or affiliation, or other personal interest of any nature or kind in any product, service, course and/or company, or in any firm beneficially associated therewith.*

10:15 a.m. *Break*

10:30 a.m. *Differential Diagnosis and the Management of the Medically Compromised Patient*
Dr. Bradford Johnson
The goal of this presentation is to serve as a brief overview of common medical conditions that may require modification of the standard treatment protocol to ensure safe endodontic treatment. The intended audience is candidates preparing for the written and oral parts of the American Board of Endodontics certification exam.

Learning Objectives:

- Describe a risk assessment strategy for medically complex patients and know when to modify your standard treatment protocol and/or seek medical consultation prior to treatment.
- Discuss common drug:drug interactions and allergies relevant to endodontic

practice.

- Explain appropriate treatment modifications for patients with cardiovascular disease, diabetes, pulmonary diseases, kidney and liver disease, immunosuppression, history of bisphosphonate therapy and prosthetic joint replacement.

Disclosure: *Dr. Johnson has a past or present consulting position or affiliation with DENTSPLY Tulsa Dental Specialties and has received honorarium from the College of Diplomates and the Chicago Dental Society.*

12:15 – 1 p.m.

Lunch

1 p.m.

Trauma and Resorption; Implications in Endodontics

Dr. Frederic Barnett

Root resorption is a common sequelae after traumatic injuries to the periodontal ligament and/or dental pulp. The course of root resorption involves an elaborate interaction among inflammatory cells and mediators, resorbing 'clastic' cells and hard tissue structures. Types of tooth resorption include internal and external resorption. Internal resorption has been categorized into internal replacement and internal inflammatory resorption. External resorption has been classified into four categories by its clinical and histologic manifestations: external surface, external inflammatory, replacement and ankylosis. This presentation will address the etiology, diagnosis and treatment of root resorption.

Learning Objectives:

- Understand the etiology and pathogenesis of the different types of root resorption.
- Develop a comprehensive treatment approach for teeth with root resorption.
- Understand the challenges involved when a tooth becomes ankylosed in the growing child.

Disclosure: *Dr. Barnett has received a past or present honorarium from Brasseler USA, Carestream Dental, SybronEndo and Ultradent.*

2:45 p.m.

Break

3 p.m.

Oral Pathology and Facial Space Infections

Dr. David Landwehr

Periapical cysts and periapical granulomas comprise the vast majority of radiolucent lesions that concern dentists and endodontists. However, numerous disease entities of variable clinical significance can be identified in the periradicular regions. This session will provide a case-based overview of periapical radiolucencies to raise clinicians' awareness about these pathologies to allow for proper diagnosis and management.

Learning Objectives:

- Develop a comprehensive differential diagnosis based on clinical and radiographic findings.
- Identify the most significant features of the presented cases and describe how these features relate to the growth pattern and radiographic presentation.
- Describe how the growth pattern of the various pathologies affects clinical

management and recurrence rates.

Disclosure: *Dr. Landwehr has a past or present consulting position or affiliation with DENTSPLY International and has received honorarium from DENTSPLY Tulsa Dental Specialties.*

4:45 p.m. *Break*

5 p.m. *ABE Boardwalk*

Dr. James D. Johnson, President of the American Board of Endodontics
The Boardwalk presentation is given by the directors of the American Board of Endodontics. It is intended to provide valuable information regarding the certification process. The directors will be introduced to the attendees and a detailed explanation of the examination sequence will be provided. Helpful hints for preparation of the Written, Case History Portfolio and Oral Examinations will be outlined. The current timeline for progression through the certification process will be detailed along with current recertification guidelines. At the conclusion of the presentation, the ABE directors will field questions from the attendees regarding topics pertaining to endodontic Board certification.

Learning Objectives:

- Describe the different levels of candidate status for Board certification.
- Describe the sequence and timelines for examinations required for endodontic Board certification.
- List the requirements for recertification.

Disclosure: *Dr. Johnson has a past or present financial/material support from Carestream Dental.*

6:30 – 8 p.m. *Wine and Cheese Reception (Diastole)*

DAY 2: Saturday, March 28, 2015

7 a.m. *Breakfast*

8 a.m. *Oral Biology*

Dr. G. Rex Holland

This presentation will look at the dental pulp as a specialized connective tissue and describe some of its properties as they pertain to clinical specialty practice. One of most curiously arranged elements in this unique tissue is the blood supply. Pulpal inflammation following injury is a core topic for endodontics. Advances in other tissues have led to an understanding that there are both antigen recognition and antigen presenting cells and thus a more thorough understanding of the tissue's responses. Some of these mysteries will be discussed. Major biological advances have been made in the molecular control of growth and development. The dental pulp is not excluded from these advances. The reparative and regenerative responses of the pulp are being studied in a new light with the hope that already resident stem cells or those deposited from outside sources can be used to replace diseased and injured tissue.

Learning Objectives:

- Recognize the complexity of the dental pulp's response to injury.
- Realize that there are basic biological processes that can be harnessed to repair or replace the pulp.
- Understand the mechanisms of nociception well enough to utilize this knowledge in pain reduction and elimination.

Disclosure: *Dr. Holland has a past or present financial/material support from Elsevier, Inc.*

9:45 a.m.

Break

10 a.m.

Microbiology of Endodontic Disease

Dr. Markus Haapasalo

The presentation is an update of endodontic microbiology with a special focus on the following topics: etiology of apical periodontitis; microbes in pathogenesis; primary infections vs. retreatment cases; localization, spreading of infection; microbial species, how much we need to know?; virulence and pathogenicity; what is biofilm?; why is root canal biofilm a challenge?; and how does endodontic treatment affect the biofilm and planktonic microbes? The topics will be discussed from both research and clinical viewpoints.

Learning Objectives:

- Describe the etiology of apical periodontitis.
- Understand why root canal biofilm is a challenge.
- Explain how endodontic treatment affects the biofilm and planktonic microbes.

Disclosure: *Dr. Haapasalo has a past or present proprietary or relevant financial relationship or received gifts in kind (including soft intangible remuneration), consulting position or affiliation, or other personal interest of any nature or kind in any product, service, course and/or company, or in any firm beneficially associated therewith, as indicated here: Grants/Research Support, Consultant, Honorarium, Financial/Material Support from DENTSPLY, Vista Dental, SybronEndo, 3M, Dentatek and Novalar; Material Support from many companies.*

11:45 a.m. – 1 p.m.

Lunch

1 p.m.

Inflammation and Immunology

Dr. Ashraf Fouad

Learning Objectives:

- Discuss the major systems that mediate the host response in pulpal and periapical inflammation.
- Identify the differences between innate and specific immune responses to endodontic pathogens.
- Describe the mechanism of bone resorption and deposition as it relates to pathogenesis and healing of periapical lesions.

Disclosure: *Dr. Fouad has no past or present proprietary or relevant financial relationship or receive gifts in kind (including soft intangible remuneration), consulting position or affiliation, or other personal interest of any nature or kind in any product, service, course and/or company, or in any firm beneficially associated therewith.*

2:45 p.m.

Break

3 p.m.

Regeneration

Dr. Jeremy Mao

Regenerative endodontics has been a concept proposed by the endodontic community for over a decade. To date, no regenerative endodontic therapy is available for the majority of patients. Why is this? Is it possible to regenerate the pulp or even dentin in permanent teeth whose apices are not as wide open as in young permanent teeth? What is the difference between revascularization and regeneration? What are the clinical toolkits that are necessary for dental pulp and dentin regeneration? What are the pros and cons of regenerating by the patient's own stem cells vs. platelet-enriched plasma vs. injecting donor stem cells? This lecture presents up-to-date and critical information for dental pulp and dentin regeneration and is designed for interactive dialogue to examine multiple meritorious approaches that may enable clinically viable approaches of dental pulp and dentin regeneration.

Learning Objectives:

- To gain basic knowledge of stem cells and their implications in orofacial regeneration.
- To understand fundamental challenges and strategies in dentin and pulp regeneration.
- To understand challenges associated with translation of scientific discoveries into dental practice.

Disclosure: *Dr. Mao has a past or present consulting position or affiliation, grants/research support and has received honorarium from the National Institutes of Health, Biotech and the AAE.*

4:45 – 5:30 p.m.

Q&A

DAY 3: Sunday, March 29, 2015

7 a.m.

Breakfast

8 a.m.

Periradicular Surgery and Repair

Dr. George Bruder

In this lecture, review surgical endodontic literature and techniques with special focus on diagnosing endodontically treated teeth that may be candidates for nonsurgical/surgical retreatment or implant therapy will be reviewed.

Learning Objectives:

- Describe the metamorphoses that exist between classic and contemporary surgical techniques.
- Identify biologic aspects of surgical endodontics and spatial features.
- Discuss the prognosis of surgical endodontics and future endodontic treatment

modalities.

Disclosure: *Dr. Bruder has a past or present consulting position or affiliation with DENTSPLY Tulsa Dental Specialties.*

9:45 a.m.

Break

10 a.m.

Antibiotics, Analgesics and Pain Control in Endodontics

Dr. Paul Eleazer

Learning Objectives:

- Differentiate between classes of antibiotics and understand technique and objectives of culture and sensitivity testing of infectious material from the jaws
- Understand how pKa affects selection of local anesthetics for time of onset, how pH affects injection pain, and how volume of solution injected can aid profoundness of anesthesia.
- Be able to quote latest opioid formulations and DEA regulations for prescription.

Disclosure: *Dr. Eleazer has a past or present consulting position or affiliation, grants/research support, has received honorarium, and other financial or material support (major clinic grant) from DENTSPLY Tulsa Dental Specialties.*

11:45 a.m.

Closing Remarks

Dr. Randy Todd

Noon

Program Conclusion