

# ZOOM IN: AMED INSIGHTS

February 2026



**Osvaldo Mayoral, DMD**  
**AMED Vice President**

As we move into another year with the Academy of Microscope Enhanced Dentistry (AMED), it's worth reflecting on what truly defines our organization. While the science and technology we support are exceptional, AMED's greatest strength has always been its people and the shared philosophy that connects us.

After 37 years in dental practice, I've witnessed significant changes in our profession. Techniques evolve, materials improve, and technology advances—but one thing remains constant: learning never stops. Many of the most valuable clinical insights I rely on today didn't come solely from textbooks. They came from relationships built through AMED—through annual meetings, thoughtful discussions, and high-quality continuing education made possible by outstanding webinars. The individuals I've met through AMED from around the globe share a common commitment not only to improving their own skills, but also to supporting and uplifting colleagues across every stage of the profession.

AMED's impact extends far beyond magnification. The Academy is deeply committed to helping dentists practice in a way that promotes excellence, comfort, and longevity. Through education in ergonomics, workflow, and precision-based dentistry, AMED provides guidance that helps clinicians reduce physical strain, improve outcomes, and enjoy longer, more fulfilling careers. At its core, AMED is about cultivating a mindset of continuous improvement and a dedication to delivering the highest level of care to our patients.



Through collaboration with dental schools across the country, AMED has also helped reshape how restorative dentistry is taught. More students are now being introduced to magnification and enhanced visualization early in their training, refining their clinical skills and elevating their standard of care from the very beginning. The long-held belief that magnification is limited to endodontics continues to fade, and AMED is proud to be part of that evolution.

Looking ahead, the future of AMED is bright. The Academy remains at the forefront of microscope-enhanced dentistry, ergonomics, and biomimetic principles—continuing to advance our profession for the benefit of both clinicians and patients. We encourage our members to invite younger dentists to join AMED and engage with the community, driven by curiosity, motivation, and a commitment to growth.

To our dedicated members and board, thank you for your leadership and service. And to those new to AMED, welcome. We look forward to sharing this journey with you and to discovering what is possible when learning, collaboration, and purpose come together.

Best Regards,  
**Oswaldo Z. Mayoral, DMD**  
**Vice President**

The Academy of Microscope Enhanced Dentistry

# ANNUAL SESSION

*25th Annual Dental Microscopy Meeting & Scientific Session*

**November 6-8, 2026**

**Waikiki Beach Marriott Resort & Spa**

For More Information

[microscopedentistry.com](http://microscopedentistry.com)

**(813)444-1011**



# February Webinars

Register Now at [MicroscopeDentistry.com!](https://MicroscopeDentistry.com)



## Magnification in Aesthetic Dentistry

Discover how magnification and the dental microscope enhance precision, improve clinical decision-making, and support minimally invasive aesthetic dentistry.

**February 21, 2026 10AM EST**

**Presented By: Dr. Rafael Piñeiro Sande**

## Other Upcoming Webinars

### From Microscope to System: Building a Microscope-Ready Practice

Discover how a microscope-first setup makes magnification a daily default, boosting ergonomics, control, and patient perception.

**March 12, 2026 7PM EST**

**Presented By: Dr. Cosimo Pilolli**



### Cracked Teeth:

#### What Can We Predictably Save?

Understand how to detect, diagnose, and manage cracked teeth using advanced imaging and clinical techniques for more predictable outcomes.

**March 26, 2026 8PM EST**

**Presented By: Dr. Judy D. McIntyre**

# Seeing More Cracked Teeth?

Judy McIntyre, DMD, MS

REPRINTED WITH PERMISSION

**Dr. Judy McIntyre** developed an interest in becoming a dentist as a young child after many positive experiences. Originally from Los Angeles, she attended the Harvard School of Dental Medicine, where she conducted research on dental unit waterline biofilms. She completed her endodontics residency at the Adams School of Dentistry at the University of North Carolina at Chapel Hill. Her research on traumatic dental injuries has been published in numerous professional journals. Dr. McIntyre has served as a Guest Board Member of the MA Dental Society, participated in the ADA and MDS Leadership Institutes, and served on the AAE Board of Directors and Committees. She continues to share her passion for dentistry, trauma, radiology/imaging, and endodontics through speaking engagements and social media.



Seemingly, in recent years, more patients are presenting with cracked teeth. A colleague recently asked, “is it that there’s an increased frequency, or is it that we’re finally noticing!?”

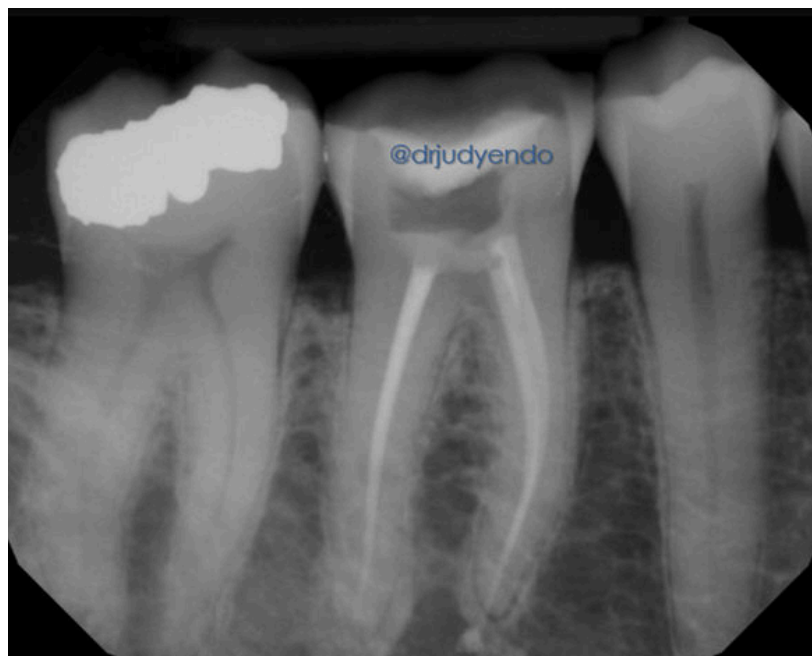
Occlusal forces and other factors can cause craze lines and microfractures in the dentition, especially with existing [larger] restorations. When these small craze lines and inclusions propagate with continued use and wear, cracks can develop in teeth. Older amalgam restorations that have been in patients’ mouths for several decades can give way after years of use - often clinically evident with stained or visible craze lines and/or marginal ridge cracks. When these craze lines propagate farther, below the CEJ, the term crack is appropriately coined, and often, the tooth may become symptomatic with pulpal involvement. As cracks propagate through the tooth, many patients may report biting sensitivity, which may eventually lead to cold sensitivity: often the first sign and symptom of pulpal involvement. Once cold symptoms are reported, patients are often referred to an endodontist.

The most beneficial conversations to have with our patients are [earlier] ones to address the incipient cracks and smaller PPDs that we encounter and visualize, especially during yearly prevention and prophylaxis visits. Starting these crack conversations with discussion about occlusal guards and/or full coverage restorations

to avoid the propagation of these cracks when craze lines, with and without probing are visualized, is the best starting point for our patients, and the wisest one to avoid an unexpected, untreatable scenario. Trusting and proactive patients may select a new restoration with or without full coverage, and in doing so, may be able to avoid endodontics all together when caught and treated early. Oftentimes, however, these conversations are occurring too late when a truly cracked tooth can no longer be saved. Luckier patients may be able to save their tooth/teeth with endodontics and restorative dentistry both.

Diagnosis to best understand how to proceed with varying case presentations should be reviewed to better inform clinicians, as well as the hygiene team. Information that should be gathered: probing, the pulp vitality testing, transillumination, the clinical exam, the patient's chief complaint, and then their imaging: periapicals, bite wings, and 3D scans is essential to this diagnosis and future treatment plan.

When the entire dental team can begin these conversations before symptoms start or worsen, and before cusps fracture, very often a full coverage crown can prevent crack propagation and avoid endodontic symptoms from developing.

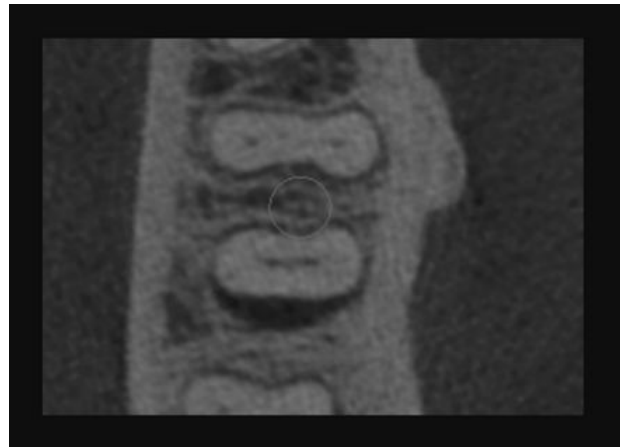




*3D imaging screenshots sharing unrestorable cracked teeth*



*Corresponding PA*



*Axial 3D image*

## References

<https://www.aae.org/specialty/wp-content/uploads/sites/2/2022/12/ecfe-2022-edition-FINAL.pdf>

<https://www.aae.org/specialty/clinical-resources/cone-beam-computed-tomography/>

Hassanzadeh, Masoud. The Cracked Tooth: A Comprehensive Guide to Cracked Teeth. 2025 Chogle, Sami, et al. The Recommendation of Cone-beam Computed Tomography and Its Effect on Endodontic Diagnosis and Treatment Planning. J Endod, Volume 46, Issue 2, 162 - 168

# 2026 AMED Courses

Register Now at [MicroscopeDentistry.com!](https://MicroscopeDentistry.com)

## Dental Microscope User Guidelines Course: Virtual

The Postural, Positioning, and Ergonomics Applied Systematic Approach to the Effective and Proper Use of the Dental Microscope

Virtual

Mar 7 | May 23 | Jul 11 | Sep 5 | Dec 12

Presented By: Dr. Juan Carlos Ortiz Hugues

## Full Mouth Rehab & Restorative Under the Microscope

Unlock the full potential of microscopic dentistry and elevate your skills in prosthodontics and restorative dentistry with our comprehensive seminar

Charlotte, NC

June 5-6 | October 23-24

Presented By: Dr. Juan Carlos Ortiz Hugues & Dr. William Linger

## Endodontics Under the Microscope

High quality & efficient endodontics using the dental microscope for endodontists and general dentists

Charlotte, NC

June 5-6 | October 23-24

Presented By: Dr. Juan Carlos Ortiz Hugues & Dr. William Linger

# AMEED

## MEET THE BOARD



**Dr. Juan Carlos Ortiz Hugues**  
President



**Dr. Randolph Shoup**  
Immediate Past  
President



**Dr. Osvaldo Mayoral**  
Vice President



**Dr. William Linger**  
Treasurer



**Dr. Christopher Laing**  
Secretary



**Dr. Mark Limosani**  
Members at Large



**Dr. Kiarash Karimi**  
Members at Large



**Dr. Tony Wu**  
CE Chair

## Don't Forget to Renew Your Membership!

The benefits of being an AMED Member include:

- Certified Microscope User
- AMED Fellowship (FAMED)
- Mastership Awards (MAMED)
- Complimentary Webinars & CE
- and More!

Go to [microscopedentistry.org](https://microscopedentistry.org) to renew today!

*Thank You*

to our 2026 sponsors



THE LEADER IN HIGH  
MAGNIFICATION DENTISTRY