Academy of Prosthodontics 2026 Annual Scientific Session
The Boca Raton Hotel, Boca Raton, FL | May 27-30, 2026

Program Speaker – Kumar C Shah BDS, MS, MBA, FACP, FAP

Title

Precision, Prediction, and Humility: The Future Prosthodontist

Abstract

As oral health becomes increasingly recognized as inseparable from systemic health, prosthodontics is undergoing a conceptual transformation, from a discipline focused on mechanical reconstruction to one engaged in systems-level biological intervention. Concurrently, advances in artificial intelligence and access to large-scale clinical datasets promise unprecedented insights into disease patterns and treatment outcomes. However, despite these technological gains, fundamental mechanistic understanding of the oral-systemic interface—particularly involving the microbiome, inflammation, and biomaterials—remains incomplete. This presentation examines the evolving role of the prosthodontist as a "systemic architect," capable of leveraging data-driven tools while critically appraising their limitations. Emphasis is placed on distinguishing correlation from causation, integrating emerging evidence from translational research institutions and adopting a posture of intellectual humility. Ultimately, the goal is to equip clinicians to navigate a data-rich yet biologically uncertain landscape with rigor, skepticism, and clinical responsibility.

Learning Objectives

- Evaluate the current evidence linking oral and systemic health
  Distinguish between association and causation in oral–systemic research, with specific reference to microbiome studies, inflammatory pathways, and emerging large-scale datasets.
- Integrate AI and big data concepts into prosthodontic decision-making
  Understand the capabilities and limitations of AI-driven analytics, including their role in risk stratification, pattern recognition, and clinical augmentation.
- Reframe prosthodontic practice within a systems biology model
  Apply a systems-oriented perspective to treatment planning that considers microbiome dynamics, biomaterial interactions, and systemic implications—while maintaining appropriate scientific humility in the face of biological uncertainty.

Biography

Kumar is a Professor of Clinical Dentistry and a Board-Certified Prosthodontist & Maxillofacial Prosthodontist in the Section of Prosthodontics at the University of California Los Angeles (UCLA). Kumar received his dental degree from The National University of Singapore and earned his Master of Science degree and a certificate in Prosthodontics at The Ohio State University. He completed Maxillofacial Prosthetics fellowship training at UCLA thereafter. Kumar also completed a Certificate Training Program in Translational Science through the UCLA Clinical and Translational Science Institute. He recently completed his Masters of Business Administration (MBA) from the University of Illinois.

Kumar was the Director of the Graduate Prosthodontics Residency Program at UCLA, Advanced Prosthodontics and Implantology Preceptorship Programs for international dentists as well as Previous

Director of the Faculty Group Dental practice at UCLA. He is a Diplomate of the American Board of Prosthodontics, a Fellow of the Academy of Prosthodontics, the American College of Prosthodontists and the International Team for Implantology (ITI). He has been on Board of Directors for several non-profit organizations within Dentistry and most recently on the International College of Prosthodontists Board.

He currently practices at the UCLA Faculty Group Dental Practice, focusing on advanced prosthodontic care and complex restorative treatments. His clinical work includes comprehensive full-mouth rehabilitation and reconstruction, management of implant-related complications, and the restoration of challenging implant cases. His practice emphasizes both fixed and removable prosthodontics, with particular expertise in implant prosthodontics and interdisciplinary treatment planning for patients requiring complex functional and esthetic reconstruction.

**Speaker has disclosed affiliation with Forsyth Academy and Kenvue*