



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

Program Speaker – Dane McMillan, MD

Title

Patient Specific Implants

Abstract

Subperiosteal implants have a complex history and were largely abandoned following the success of endosseous implants. However, endosseous implants require adequate bone volume, limiting their use in certain patients. Alternative treatments—including guided bone regeneration, sinus augmentation, and zygomatic implants—have expanded options but remain constrained by anatomical and clinical factors. This presentation explores the evolution of modern, patient-specific bone-anchored subperiosteal implants, reviews the supporting evidence, outlines indications and contraindications, and shares clinical experience with this emerging treatment approach.

Learning Objectives

- Review the historical development of subperiosteal implants and the factors contributing to early design limitations.
- Evaluate the current evidence supporting bone-anchored patient-specific subperiosteal implants.
- Identify appropriate indications and contraindications for this treatment modality.

Biography

Dr. Dane McMillan is a board-certified prosthodontist and oral and maxillofacial surgeon practicing in Ottawa, Ontario. He completed his prosthodontic specialty training and Master of Science degree at the University of Minnesota. He is a Diplomate of the American Board of Prosthodontics and a Fellow of the Royal College of Dentists of Canada in Prosthodontics.

Dr. McMillan completed his oral and maxillofacial surgery residency at the Mayo Clinic, where he earned his Doctor of Medicine degree from the Mayo Clinic Alix School of Medicine. He is a Diplomate of the American Board of Oral and Maxillofacial Surgery and a Fellow of the Royal College of Dentists of Canada in Oral and Maxillofacial Surgery. He most recently completed a fellowship in Craniomaxillofacial Trauma and Reconstructive Surgery at Duke University. His clinical interests focus on complex surgical and prosthetic reconstruction, particularly for trauma and pathology.