Title
Vertical Hard Tissue Augmentation in the Aesthetic Zone

Abstract
Various techniques have been described for vertical ridge augmentation. These include guided bone regeneration (GBR), autogenous onlay block grafting, titanium mesh techniques, distraction osteogenesis, and interpositional osteotomy. While many techniques offer excellent results in some situations few can be said to guarantee success. Many questions remain on which methods yield the most predictable results for dental implant placement in grafted bone. The aim of this lecture is to critically evaluate the current evidence to determine the predictability of various bone augmentation techniques for vertical ridge defects for implant placement. A series of cases have been gathered to illustrate risk assessment and predictable management of various critical size defects ranging from moderate to severe defects.

Learning Objectives
1. Describe the anatomic basis and principles of vertical hard tissue grafting for implant site development.
2. Describe a simple diagnostic parameter to assess the risks involved in the treatment of each individual patient.
3. Apply practical methods of handling the vertically deficient ridge

Biography
DR. BACH LE
Dr. Le completed his specialty training in Oral & Maxillofacial Surgery at Oregon Health Sciences University and is currently Clinical Associate Professor at the Herman Ostrow School of Dentistry at USC. Dr. Le has authored over 13 chapters in textbooks on bone regeneration and dental implants and has published extensively in peer-review journals. He has been a main podium speaker at numerous organizations including the AAOMS, Academy of Osseointegration, American Academy of Esthetic Dentistry, American Academy of Implant Dentistry, American College of Prosthodontists, Greater New York Academy of Prosthodontists, and the International Congress of Oral Implantologists. Dr. Le was recently inducted as an Honorary Member of the American College of Prosthodontists and is a recipient of the Charles E. English Award in Clinical Science. He is a Diplomate of the American Association of Oral & Maxillofacial Surgeons and holds Fellowship in the American College of Dentists, the International College of Dentists and the International Association of Oral & Maxillofacial Surgeons.