BIOGRAPHICAL SKETCH:

Dr. Lyndon Cooper D.D.S., Ph.D. is the Stallings Distinguished Professor of Dentistry of the Department of Prosthodontics at the University of North Carolina at Chapel Hill. He is currently Chairperson, acting Director of Graduate Prosthodontics and the director of the Bone Biology and Implant Therapy Laboratory. Dr. Cooper is a Diplomate of the American Board of Prosthodontics and served as the 2010 President of the American College of Prosthodontics. He received the ACP’s 2004 Clinician/Researcher Award and the IADR’s 2009 Distinguished Scientist Award for Prosthodontics and Implantology. Dr. Cooper’s laboratory focuses on bone biology, adult stem cell bone regeneration, and clinical evaluation of dental implant therapies. The laboratory receives funding through NIH and by industry collaboration. Their research findings have been presented in over 90 publications and in more than 250 national and international presentations. These efforts integrate basic and clinical research to improve patient care.

LECTURE TITLE: “Innovations and Applications of CAD/CAM Technology to Clinical Prosthodontics”

LECTURE SYNOPSIS:

Is there a place in contemporary Prosthodontics for digital technologies that replace conventional impressions and laboratory procedures? The goal of this presentation is to consider the positive and negative aspects of creating tooth and implant restorations using currently available digital technologies. The main issues open for debate include an evidence-based discussion of quality of virtual impressions, waxing, occlusion, casts and the restorations that are created from them. However, consideration of process, work-flow, capital-equipment versus consumable materials investment and delegation of procedures are additional anticipated issues of interest to the practicing dentist. Direct digital dentistry offers opportunity for in-depth consideration of how single tooth restorations are realized in clinical practice.

Objectives:

• Understand the work flow of direct digital restoration as illustrated using the E4D system.
• Appreciate the multiple issues that confront the clinician in making decisions to deploy direct digital dental technologies in their practice.
• Acknowledge the current data that supports and / or refutes the use of digital technologies in the process of design, impression, manufacture and provision of single tooth restorations.