**Course Overview**

The biologic mandate of successful endodontic treatment outcome is a healthy apical periodontium and long-term survival of the tooth. These objectives are achieved by meticulous disinfection of the root canal space, avoiding excessive removal of dentin, and optimal sealing of the root canal and coronal spaces.

The XP family of endodontic instruments have been modeled to achieve a fusion of technology and biology that integrates all variables essential for predictable endodontic success.

The superelasticity and shape-memory of the alloy used in XP instruments facilitates expansion and adaptation into canal morphology where traditional in-the-round NiTi files are unable to reach with any margin of safety. This enables maximal debridement and disinfection without changes to the original canal shape and ensures minimal removal of intra-canal dentin. This ultra-conservative root treatment can then be filled using bioceramic technologies that do not require excessive preparation in the coronal component of the root canal space to accommodate obturation procedures.

This presentation will emphasize the biologic essentials of long-term successful endodontics. Evolutionary strategies using new generation instrumentation and root filling technologies will be discussed. The treatment parameters discussed for vital and non-vital teeth will prevent or resolve apical periodontitis thereby ensuring the long-term survivability of the tooth. The endodontic restorative synchronicity resulting from ultra-conservative root treatment is now the default position of rehabilitation and further adds the return of the treated tooth to its functional and harmonious integration in the dentition.

**Objectives**

- Understand the shortcomings of traditional files that produce round shapes
- Understand the addition of 3D files to clean to maximal diameters with conservative dentin removal
- Understand the use of bioceramic sealer in both cold and warm hydraulic techniques

**Predictable Endodontic Success; Accessing the 3rd Spatial Dimension: Hands-On Workshop**

Evolutionary technologies have resulted in new generation of instruments designed to access areas that traditional “round” NiTi cannot safely reach. After initial negotiation of the root canal space with a glide path file, these “virtual core” files complete the cleaning to the maximum natural diameter. The native anatomy configuration is sustained and intra-canal dentin conservation is optimized. This conservative root treatment is completed by bioceramic root filling technology that does not shrink, wash out or require excessive preparation on the coronal third of the canal space. Participants will learn the shortcomings associated with traditional NiTi instrumentation and legacy obturation techniques and how this new evolutionary generation of 3D files and bioceramic technologies will obviate these shortcomings and engender predictable endodontic success:

**Course Tuition** $349 | **Number of Credit Hours** 8

_Predictable Endodontics: Martin Trope, DMD_  
_Diplomate, American Board of Endodontics_  

Dr. Martin Trope was born in Johannesburg, South Africa where he received his BDS degree in dentistry in 1976. From 1976 to 1980 he practiced General Dentistry and Endodontics. In 1980 he moved to Philadelphia to specialize in Endodontics at the University of Pennsylvania. After graduating as an Endodontist he continued at the University of Pennsylvania as a faculty member until 1989 when he became Chair of Endodontology at Temple University, School of Dentistry. In 1993 he accepted the JB Freedland Professorship in the Department of Endodontics at the University of North Carolina at Chapel Hill, School of Dentistry. Named in honor of one of the founding fathers of Endodontics, the Freedland Professorship recognizes significant contributions to the specialty. Dr. Trope is now Clinical Professor, Department of Endodontics, School of Dental Medicine, and University of Pennsylvania. He is also in private practice in Philadelphia, PA.

Dr. Trope has served as a Director of the American Board of Endodontics. Before entering full time private practice he was editor-in-chief of two journals, Dental Traumatology and Endodontic Topics. He also serves on the Editorial Board of Oral Surgery, Oral Medicine, Oral Pathology and on the Advisory Board of Esthetic Dentistry. He has published over 180 papers and written many book chapters. In 2002 he was awarded “The Louis I. Grossman Award” for cumulative publication of significant research by the American Association of Endodontists.

Dr. Trope is actively involved in the development, design and promotion of new technological advancements in Endodontics. Presently he acts as Clinical Director for Brasseler Dental Company.