



## **Academy of Prosthodontics Annual Scientific Session Naples, Florida | May 3 – 6, 2023**

### **Program Speaker – Hans-Peter Weber**

#### **Title**

Implant Dentistry - 40 Years of Evolution in Retrospect

#### **Abstract**

Since the introduction of osseointegration by P.I. Brånemark that gave rise to an exciting new treatment concept for the replacement of missing teeth, an amazing evolution has occurred in the field. Brånemark was the first to propose a clinical protocol to achieve successful osseointegration: biocompatible material (cp titanium with a machined surface), minimally invasive osteotomy, primary implant stability, submerged implant healing and avoidance of implant loading for 3-6 months. He also insisted that only specialists should perform this kind of treatment. While this protocol was geared towards safety and predictability, the resulting long treatment duration and the imposed provider restriction became a challenge for patients and providers. In the 1980ies, Schroeder and others in the Germanic part of Europe were able to show that non-submerged implant placement did not jeopardize the predictability of osseointegration. They also could demonstrate the advantages of rough surfaces to achieve faster bone healing around implants. These findings opened the door for many further developments such as early and immediate loading as well as immediate restoration of implants placed at the time of extraction, all concepts which are frequently applied in modern implant prosthodontics. Most recently, the digital evolution, which includes new technologies and materials, has captured greatest attention in the field. It will be the purpose of this presentation to highlight some of the exciting developments and compare the new with the 'good old'.

#### **Learning Objectives**

1. Capture the major developments in implant dentistry over the past 40 years.
2. Compare benefits of digital approaches to treatment planning and implant surgery with conventional techniques.
3. Revisit the critical components for long-term stability of dental implants.

#### **Biography**

Hans-Peter Weber, DMD, Dr. med. dent., Professor of Prosthodontics Emeritus at Tufts University School of Dental Medicine, holds dental degrees from the University of Berne, Switzerland (1976)

and the Harvard School of Dental Medicine (1990), as well as Certificates in Prosthodontics (1979) and Periodontology (1984) from the University of Berne. He served as Chair of the Department of Restorative Dentistry and Biomaterials Sciences at the Harvard School of Dental Medicine from 1994-2010, and as Chair of the Department of Prosthodontics at Tufts from 2010-2018. Since his retirement from full-time academic dentistry, he provides implant-prosthodontic patient care at ClearChoice Dental Implant Associates in Quincy and at Boston Prosthodontics in Boston. He maintains a volunteer teaching involvement in Postgraduate Prosthodontics at Tufts. He has contributed extensively to the scientific and clinical literature in the field of implant dentistry and is a regularly invited panelist at national and international meetings. Dr. Weber serves on the review boards of several peer reviewed dental journals. An Honorary Member of the American College of Prosthodontists, he is a Past President of the Academy of Prosthodontics and the Greater New York Academy of Prosthodontics. In 2018, he was awarded Honorary Fellowship in the International Team of Implantology (ITI).