



Academy of Prosthodontics 2019 Annual Scientific Session Fairmont Banff Springs Hotel, Banff Canada May 29 – June 1, 2019

Program Speaker - Dianne Rekow, DDS, PhD, MBA, FDSRCS (England)

Title

The Digital Tsunami: What Does the Future Promise?

Abstract

Digital Dentistry is creating a tsunami which will disrupt practices and personal lives. This presentation highlights new and emerging technologies that can change dentistry. We already live in instrumented 'glass houses'; cell phones reveal our location; voice-activated devices play music, answer questions, remotely open garage doors and start our cars. Smart health tools, integrated into rings, bracelets, watches, and clothing monitor activities, then automatically upload and report physiological information to clinicians. Artificial intelligence along with augmented, virtual and mixed reality enhances access to information, decisions making, and creates virtual patients. Robots and nanobots can deliver dental procedures and track and report physiological conditions. Additive manufacturing enables new ways of designing 'parts'; perhaps we should re-think prosthesis and implant design. How these and other technologies may affect dentistry's future will be described. This tsunami promises huge potential, limited only by our imagination, creativity and ingenuity (and a good bit of energy).

Learning Objectives

1. Realizing the breadth of digital dentistry is far more expansive than only CAD/CAM
2. Explore new technologies and how they might enhance - and disrupt - dentistry, including smart digital health devices; robotics; artificial intelligence; augmented, virtual and mixed reality; haptic systems, 3D printing, and more.
3. Appreciation that disruption of common practices does not necessarily mean destruction of these practices.

Biography

DIANNE REKOW, DDS, PHD, MBA, FDSRCS (ENGLAND)

Dr. Rekow earned graduate degrees in mechanical and biomedical engineering, dentistry and business. She has held leadership positions in both dentistry and engineering at various US institutions and recently retired from her post as Executive Dean of King's College London Dental Institute, the largest dental school in Europe. As a pioneer of CAD/CAM technologies, Dr. Rekow strongly supports new technologies and has had over \$10 million of peer-reviewed research funding. Capitalizing on expertise of team members, drawn from numerous universities, private practices, and industry, her teams have produced hundreds of publications and presentations. Many of the team's junior researchers now lead their own successful research initiatives. Dr. Rekow has been President of both the American and International Associations for Dental Research and the Angle Society, North Atlantic Component. She is a fellow of the Greater NY Academy of Prosthodontics, the Academy of Dental Materials, and the International College of Dentists.