

# Spring Scientific Seminar

Friday, May 13, 2016 Pier Sixty, Chelsea Piers, New York City

Speaker: Markus B. Blatz, DMD, PhD

"The Ceramic Update in Esthetic Dentistry"

The contribution of digital technologies, new ceramic materials and resin bonding concepts offers a whole new range of exciting treatment options that are not only esthetic and less invasive, but also long-term functional, ranging from conservative veneers to implant-supported full-mouth rehabilitations. However, the vast influx of new ceramic and hybrid materials, adhesive technologies and digital workflows makes it increasingly difficult for clinicians to select the proper treatment for a specific patient situation. Physical and optical properties of modern ceramic materials are significantly different from traditionally applied materials. They may even differ within a certain material group ("is all zirconia the same?") and require very specific laboratory and clinical handling protocols for them to function successfully in the oral cavity. Case selection, preparation, manufacturing, cementation and resin bonding technologies are fundamentally important and must be applied based on the respective restorative material properties and the latest scientific evidence.

## Course Objectives:

- Implement fundamental esthetic guidelines
- Learn about CAD/CAM technology and its diverse applications
- Understand strategies for success with ceramic restorations based on the current scientific evidence
- Comprehend adhesive dentistry in combination with indirect restorations
- Understand guidelines for successful and long-lasting esthetic restorations from laminate veneers to full-mouth implant-supported rehabilitation

#### **About the Speaker:**

Dr. Markus Blatz is Professor of Restorative Dentistry and Chair of the Department of Preventive and Restorative Sciences at the University of Pennsylvania School of Dental Medicine in Philadelphia, PA, where he also founded the Penn Dental Medicine CAD/CAM Ceramic Center. Dr. Blatz graduated from Albert-Ludwigs University in Freiburg, Germany, and was awarded additional Doctorate Degrees, a Postgraduate Certificate in Prosthodontics and, most recently, Professorship from the same university.

Dr. Blatz is co-founder and President of the International Academy for Adhesive Dentistry (IAAD). He is a Board-certified Diplomate in the German Society for Prosthodontics and Biomaterials (DGPro) and a member of multiple other professional organizations, including the European Academy of Esthetic Dentistry, the American College of Prosthodontics, Academy of Osseointegration and OKU Honor Dental Society He serves on the editorial boards of numerous recognized scientific dental journals and is Associate Editor of Quintessence International as well as co-author of the recent internationally celebrated book "Evolution – Contemporary Protocols for Anterior Singe-Tooth Implants".

Dr. Blatz is the recipient of multiple teaching and research awards and has published and lectured extensively on dental esthetics, restorative materials and implant dentistry.

Speaker: Haim Keren, MDT

"Digital Workflow – From Virtual to Reality"

This presentation will focus on the 9-year experience of creating monolithic or minimally veneered zirconia restorations.

Laboratory protocols for zirconia restorations of different complexities will also be shown and discussed. Digital processes and their advantages in the production of zirconia restorations will be shown. Special emphasis will be placed on most common misconceptions and pitfalls in creation of zirconia restorations and how to avoid them.

# Course Objectives:

The participants of this lecture will

- Gain insight into the newest digital protocols for creation of zirconia restorations
- Gain a better understanding of different approaches to creation of zirconia restorations
- Gain tools to make a scientifically based decision in regard to zirconia restorations and their type

## **About the Speaker:**

Mr. Haim Keren, MDT, is the owner of Kerenor Dental Studio, a full-service all-ceramic laboratory in Montreal, Canada, that specializes in zirconia restorations. He completed his CDT degree in Israel and followed that with an MDT degree in Israel and in Germany. After working with his father, Jacob Keren, MDT, in the family laboratory in Israel for more than 14 years, Mr. Keren relocated to Montreal in 1999 to establish his own business. Alongside his wife, Julie, he develops special techniques and procedures for monolithic and minimally veneered zirconia restorations, and has established protocols for the digital manufacture and design thereof that the rest of the industry continues to adopt.

Mr. Keren has published numerous papers, including the world's first publication on monolithic zirconia design. He lectures nationally and internationally on technical and prosthetic aspects of monolithic zirconia.

Speaker: Michael S. Block, DMD

"Digital Methods to Improve Implant Placement"

The accuracy of implant placement will affect restorative care. Placement method includes freehand insertion, static CT generated guides or dynamic navigation. This talk will describe and compare how to improve implant placement accuracy for single tooth and full arch restorations. These methods can be used in an effective workflow on 90% of implant placements.

#### Course Objectives:

At the end of this talk the attendees will

- Understand the evidence to base implant placement comparisons
- Understand workflow considerations including the use of a planed final prosthetic design to guide implant placement
- Understand how to use preoperative methods to decrease conversion chair time

#### **About the Speaker:**

Dr. Michael Block graduated from the University of Rochester in 1975, attaining both a BA in Biology and a BS in Biomedical Engineering. He completed his dental training at the Harvard School of Dental Medicine in 1979, receiving his DMD cum laude in a special field. He completed his residency program in Oral and Maxillofacial Surgery at the LSU School of Dentistry in 1983. He remained at the LSU School of Dentistry and achieved the academic rank of Professor in the Department of Oral and Maxillofacial Surgery. Currently he is in private practice dedicated to patient oriented care.

Dr. Block is the editor-in-chief of five textbooks on dental implants, Endosseous Implants for Maxillofacial Reconstruction, Implants in Dentistry, Color Atlas of Dental Implant Surgery: the 4th edition was published in 2014. He is Past President of the Academy of Osseointegration, and has been program chair for three of the annual programs. Dr Block serves on the American Association of Oral and Maxillofacial Surgeons (AAOMS) Committee on Continuing Education. Dr. Block has been an examiner for the American Board of Oral and Maxillofacial Surgery. He is a Section Editor on Dental Implants for the Journal of Oral and Maxillofacial Surgery.

Dr. Block is particularly interested in the translation of technology for efficient and predictable reconstruction of the jaw to provide ideal bone for implant placement and esthetic replacement of missing teeth, the use of multiple techniques and implants to reconstruct significant atrophic conditions and interceptive strategies for rehabilitating extraction sites with implant restorations.

# Speaker: J. Robert Kelly, DDS, MS, DMedSc

"Ceramics in Implant and Restorative Dentistry: Best Practices and Issues"

Ceramics are being used increasingly for both structural and esthetic components of prostheses and implants. Study of failed clinical specimens as well as examination of specimens from clinically-valid fatigue testing is yielding valuable information about what clinicians and manufacturers can do to best optimize both esthetics and function. Such study also leads to some concerns such as manufacturers who do not appear to have used basic ceramic engineering principles when transitioning a metal part to ceramic and extreme performance differences between manufacturers for seemingly identical parts.

## Course Objectives:

- Review which ceramics are being used today in implant and prosthetic dentistry and their clinical indications
- Examine what we know about maximizing durability and esthetics and how we know it (clinical, simulation and/or modeling data)
- Be introduced to how the properties of ceramic parts are exceedingly sensitive to how they are fabricated (ceramics processing)

### **About the Speaker:**

Dr. J. Robert Kelly teaches graduate prosthodontics and biomaterials at the University of Connecticut Health Center. His academic credentials include a DDS (The Ohio State University), an MS in Dental Materials Science (Marquette University), the DMedSc in Oral Biology and a Certificate in Prosthodontics (Harvard/MIT). He is Vice Chair of the ADA Standards Committee on Dental Products, President of the Academy of Dental Materials and Past President, American Academy of Fixed Prosthodontics. Dr. Kelly has received awards for biomedical research (Harvard), research and post-graduate education (Association of Military Surgeons of the United States) and as a clinician/scholar (American College of Prosthodontists). He has contributed to dental, engineering and medical literature, holds eight patents, frequently lectures before national and international dental and engineering organizations, still does some of his own porcelain and keeps his fingers wet practicing prosthodontics.

Speaker: Stephen L. Jacobs, BDS, MJSDF, RCS(Eng)

"Is There a Need for Speed – A Look into the Science and Techniques that Apply for the Placement of Implants into Extraction Sockets and Their Immediate Restoration"

There is much controversy surrounding the immediate placement of implants into fresh extravction sockets. This lecture will examine some of the evidence base, look into case selection, explain the techniques that can be used and describe a protocol for the management of these cases, including the fabrication of provisional crowns. The importance of implant design, implant position and the presence or absence of bone will be discussed.

#### Course Objectives:

Following the lecture, attendees will have an understanding of

- The evidence for and against placing implants into extraction sockets, including the relevance of implant stability in immediate implantation
- The importance case selection and the specific techniques that are required for placement of the implant and fabrication of the provisional restoration
- When this protocol can be applied to the challenges in the esthetic zone

# About the Speaker:

Dr. Stephen Jacobs graduated from Birmingham University in 1985 and went into general dental practice. He started in implant dentistry in 1991 and since then has placed/restored several thousand implants and carried out over 1500 sinus grafts. He trained in the UK, USA and Europe and he now lectures extensively on all aspects of dental implantology throughout the United States, Asia, Continental Europe and the UK.

Dr. Jacobs runs his implant referral practice in Glasgow, UK, where all aspects of implant and reconstructive dentistry are carried out. He is a Key Opinion Leader and Ambassador for Dentsply Implants and works in practice research, currently on three projects.

Dr. Jacobs is a Past President of the Association of Dental Implantology UK (ADI) and a Fellow of the Academy of Osseointegration, serving on several AO committees. He is the UK Ambassador for AO, a founding board member of PEERS UK, and is the Scientific Chair of the ADI.

Dr. Jacobs is on the editorial board of three journals and runs a variety of courses at his practice, including a comprehensive year course for those willing to get started in the field of implantology, sinus grafting and restorative programs. He currently mentors several dentists and is experienced with many implant systems.