Dr. J. William Robbins – San Antonio, Texas

**Dentoalveolar Extrusion – The Most Difficult Patient in Dentistry**

As our patients become more discriminating, dentists must become better diagnosticians as well as clinicians. The most difficult patients to treat in the adult restorative practice are the wear patients. As the teeth wear, they commonly move into positions that make restorative dentistry difficult and sometimes impossible. This condition is termed “Dentoalveolar Extrusion” (DAE). The understanding of the DAE has completely revolutionized the diagnosis and treatment planning of this difficult subset of patients. The DAE wear patient commonly requires an interdisciplinary treatment approach to achieve an aesthetic and functional result. This lecture will address the following topics: review of CORE diagnosis principles, diagnosis of DAE, interdisciplinary approach to DAE, 8 treatment options for treating DAE, and case studies to illustrate treatment options. Following this presentation, attendees should appreciate:

- Diagnose dentoalveolar extrusion (DAE)
- Indications for functional crown lengthening as a treatment for DAE
- Indications for orthodontic intrusion as a treatment for DAE
- Methods of dealing with inadequate space and excess space in the DAE patient
- Five additional less commonly used treatments for DAE.

**The Extraordinary Lower Incisors**

It has been pronounced that the state of a dental system can be assessed simply by carefully looking at the lower incisors. Is that so? It is, if you know what you are looking for. Many aspects of the lower front teeth will be touched upon from their premature eruptive patterns to the eventual, various worn and misaligned states; at all times comparing ideal to pathologic forms and functions. Reference will be made to an unprecedented study using a bioesthetic maxillary anterior guided orthosis (BMAGO). Following this lecture, attendees should:

- Appreciate the vital roles that lower incisors play in facial growth and orognathic development.
- Recognize optimal form and function found in natural adult dentitions.
- Be aware that the pristine state of anatomy and physiology is fundamental to diagnosis of problematic dental systems.
- Be capable of designing successful comprehensive restorative dental solutions.
Many orthodontic patients have discrepancies that can’t be corrected with conventional orthodontics, but are not severe enough for orthognathic surgery. Accelerated orthodontics and skeletal anchorage have been used for a number of different dentoalveolar problems, examples of these would include: anterior open bites, anterior crossbites, excess overjet, and constricted arches. This presentation will highlight goal directed treatment planning, based on the position of the upper and lower incisors, facial esthetics, smile esthetics and joint position. Dentoalveolar distraction osteogenesis (DDO) can be utilized to correct an unfavorable anteroposterior relationship between the maxillary teeth and the skeletal base. Skeletal anchor plates which are implanted in the zygomatic buttress area, serve as absolute anchorage for maxillary molar intrusion. In addition, they can also be used for Class II correction. A wide variety of clinical cases at different stages of treatment will be presented. Following this lecture, attendees should comprehend:

- Diagnosis anterior openbites.
- Protocols for maxillary anchor plates.
- Protocols for dentoalveolar distraction osteogenesis.
- Protocols for Class II and Class III correction.

The diagnostic challenges of TMD & Orofacial Pain

The dental practitioner is constantly being challenged by new information and concepts in the area of orofacial pain and temporomandibular disorders. Although much of this information is very helpful in managing TMD, the practitioner must be mindful of the fact that there are many sources of orofacial pain. In order for a practitioner to be successful, he or she must be able to separate TMD from other orofacial pain conditions so that appropriate treatment may be selected. This is the process of diagnosis and is the most critical aspect of pain management. This presentation will also discuss the etiologic factors associated with TMD and where occlusal therapy may find its role in management. Following this presentation, attendees should:

- Be able to differentiate between TMD and other orofacial pain conditions.
- Be able to differentiate the site and source of pain.
- Understand the common patterns of pain referral in the orofacial structures.
- Appreciate the various types of orofacial pains.

TMJ Pathosis and Associated Effects on Facial Growth and Airway

Cone Beam CT can reveal hidden anatomy and disclose important anatomic variations that can’t be visualized on traditional panoramic and cephalometric projections. This presentation will elucidate the imaging findings, natural course and prognosis of several TMJ conditions and their influence on facial growth and airway. Following this lecture, attendees should understand:

- Concepts of normal TMJ growth and development.
- The identification of abnormal TMJ form.
- Functional and anatomic relationships between TMJ growth, jaw growth, and airway dimensions.
11:15-11:55  
**Dr. R. Andrew Girardot** – Denver, Colorado  
**Joint Overload in Children and Adolescents: The Problem, It’s Effect on Facial Growth, Prevalence, Possible Causes and Possible Treatment**

This presentation will provide a brief overview of facial growth emphasizing the role of the mandible and the TMJ. Next, the effects of joint overload (e.g., disc displacement) on growth will be presented. The magnitude of the problem and its prevalence will be discussed. Lastly, possible causes and possible treatment will be introduced. The entire presentation will be documented with appropriate bibliography and observational evidence. Following this presentation, attendees will better appreciate:

- Mandibular growth and its crucial effect on facial balance and occlusion
- The importance of TMJs in mandibular growth
- The impact of TMJ insult on mandibular growth
- Interpretation of TMJ imaging as a diagnostic tool
- Treatment objectives and methods

12:00-12:30  
**Dr. Eric McRory** – Bellingham, Washington  
**A New Patient Exam for the Contemporary Gnathologist**

Introducing a new patient to your dental practice is a critical first step in providing thorough dental care to any patient, and it’s especially important in complex restorative care. The new patient exam process is usually a patient’s first impression of you, your staff, and the type of dental care that you provide. In addition, this exam should be done systematically to permit acquisition of all relevant information prior to treatment planning. All too often, we fall into the trap of providing routine “emergency care” or succumb to the request “I just get a cleaning”. This presentation illustrates a new patient management system that emphasizes quality care, complete data gathering, and avoidance of common traps that often turn practices into chaos. Following this lecture, attendees should:

- Better understand triage of patients as well as the best questions to ask new patients.
- Appreciate the value and use of visual aids in patient education.
- Be comfortable accomplishing occlusal evaluations, TMD screenings, and periodontal exams.
- Understand data gathering from “healthy” patients and patients requiring complex care.

12:30-2:00  
**LUNCH WITH EXHIBITORS**

2:00-5:00  
**TABLE CLINIC SESSION**

**Dr. Bryan S. Baker** (Manhattan Beach, California) – *Comparison of Various Registration Techniques to Maximize the Airway in Sleep Apnea Patients*

**Dr. Michael D. Cary** (Sherwood, Oregon) – *Preventive Gnathology#2: Treatment Sequencing of Biobloc Orthotropics*

**Dr. Matthew R. Checketts** (San Antonio, Texas) – *Digital Kesling Set-Up – A Novel Approach to Planning Interdisciplinary Treatment*

**Dr. Paul Hasegawa** (Seattle, Washington) – *Navigating the International Academy of Gnathology Web Site: www.gnathologyusa.org*

**Dr. Andrew Johnson** (Memphis, Tennessee) – *Use of CAD/CAM Occlusal Veneers to Ease the Vertical Transition when Restoring Worn Dentition*

**Dr. Elif I. Keser** (Istanbul, Turkey) – *Piezocision Assisted Orthodontics*

**Dr. Kevin Komatsu** (Los Angeles, California) – *Temporary Implant Abutments for Quick and Easy Peri-Implant Tissue Contouring*

**Korey R. Korfiatis** (Wenatahee, Washington) – *Dental Marketing for the New Economy*

**Dr. Alexandros Manolakis** (Thessaloniki, Greece) – *Intra-Operative Bite Registration for Immediate Loading of Implants Placed in the Edentulous Jaw*

**Dr. A. Burton Melton** (Albuquerque, New Mexico) – *CAD/CAM Complete Dentures and Their Many Other Applications*
Drs. Shane Samy (Eugene, Oregon) & James L. Delgado (Albany, Oregon) – Preventing and Managing Dental Implant Complications

Dr. Steve Schmitt (San Antonio, Texas) – Dental Casts and Articulation in the Digital Age

Dr. Ryan Sheridan (San Antonio, Texas) – Fabrication of a Custom Central Bearing Point Device for Functional Generation of Occlusal Surfaces

Dr. Robert C. Supple (Albuquerque, New Mexico) – Digital Occlusal Force Patterns

Dr. Stephen Wagner (Albuquerque, New Mexico) – A One-Appointment Final Impression Technique Using a Newly Designed Prefabricated Edentulous Tray

Dr. Darin J. Ward (Alberta, Canada) – Preventive Gnathology #1: The Etiology of Malocclusion

Dr. Mark Z. Yamamoto (Huntington Beach, California) – Anterior Open Bite with TMD

6:00-10:00 GROUP DINNER

Friday, September 20, 2013

7:30-8:15 International Academy of Gnathology, American Section, business meeting (members only)

8:30-9:10 Dr. Frank Higginbottom – Dallas, Texas


Dentists for many years have performed very well using the analog world. Years ago, dentistry began going digital with a computer at the front desk, then in the operatory and digital records. Digital radiographs were a breakthrough in technology. This modality is still only 30-40% saturation of practices today. Today dentists have the option of incorporating digital technology to actually make treating our patients better. From digital radiographs, digital records keeping, to cone beam CT’s. We have so much more information for diagnosis and treatment planning today. Dentists can perform digital planning for implants, digital placement, digital impressions, and CAD/CAM restorations. Following this presentation, attendees should better understand:

- Cone beam CT technology and digital implant planning.
- Local digital guide fabrication and guided implant surgical placement.
- Digital impressions and CAD/CAM restorations.
- Incorporation of soft tissue lasers in routine therapy.

9:15-10:00 Dr. Neal Patel – Powell, Ohio

3D Gnathology – Integration of Digital Jaw Tracking with CBCT and CAD/CAM

Dr. Patel is involved in R&D with respect to Cone Beam CT Imaging, CAD/CAM dental technology, and Digital Biometrics in Gnathology for several dental manufacturers. He will showcase the future of Digital Gnathology and the integration of all three of these cutting edge technologies for 3D Jaw Tracking. This can be a great tool to help the dentist understand the overall health of their patient’s stomatognathic system. Joints, muscles and teeth each play a role in determining a person’s oral health and stability. The way that the jaw moves, specifically, the analysis of mastication patterns can give us underlying clues to the quality of function and stability of our patient’s joints, muscles and occlusion. Dr. Patel will show how to show Digital Mastication Analysis using integration of Cone Beam CT, CAD/CAM, and Digital Jaw Tracking in one software environment. Mastication analysis can also be used to help restore good function within the constraints of an imperfect existing occlusion. Following this presentation, attendees should better understand:

- The general applications of CBCT in comprehensive and interdisciplinary dentistry
- The current digital methods of Jaw Tracking
- The use of in-office CAD/CAM for restorative therapy
- Future integration of 3D CBCT Imaging, CAD/CAM, and 3D Jaw Tracking.

……………… BREAK WITH EXHIBITORS (30 minutes) ………………………………………………………………………………….
10:30-11:25  Dr. Charles J. Goodacre – Loma Linda, California

**CAD/CAM Fabricated Complete Dentures: Method of Obtaining Required Morphologic Data and Fabrication Process**

This presentation will show the steps used to clinically record the morphology of the intaglio and cameo surfaces of complete dentures that can then be scanned, the prosthetic teeth arranged in a virtual environment, and then the prostheses fabricated using a CAD/CAM process. Following this lecture, attendees should appreciate:

- Concepts by which complete dentures are fabricated using CAD/CAM technology.
- Clinical steps used to record the required morphology of complete dentures.
- Benefits of using a 3D Complete Denture Tooth Arrangement program.

11:30-12:30  Dr. Chuck DeFreest – San Antonio, Texas  
Dr. Steve Schmitt – San Antonio, Texas

**Digital Technology: What Would Charlie Do?**

Dentistry is going through a transformative period. Cone beam computed tomography, laser and light scanning of casts, computer aided design, digital manufacturing, zirconia, milled titanium, milled dentures, implants, jaw surgery and digital recording of jaw motion are all available and accurate. The challenge is to effectively utilize these systems and materials to improve the diagnostic process and make dental care cost effective and appropriate. Charlie was always looking to the future and would have embraced these new and powerful tools. Following this presentation, attendees should better understand:

- How data acquired from different scanning devices can be joined in virtual computer space.
- Advantages of digital treatment planning over conventional methods.
- Diagnostic problems associated with digital technologies.
- How clinicians can help to improve these new techniques and technologies.

12:30+  UNSCHEDULED AFTERNOON AND EVENING – Optional activities sign-up during registration

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Saturday, September 21, 2013

8:00-8:55  Dr. Howard M. Chasolen – Sarasota, Florida

**The Key to Meticulous Restorative Dentistry – The Adhesive Core, Provisional Restoration & Biologic Shaping**

The goal of this program is simple; present a methodology and protocol for doing an adhesive core and a provisional to prepare a patient for periodontal corrective procedures. Without periodontal corrective procedures, many of our adult patients with existing restorative dentistry cannot be treated effectively. And without an adhesive core and a provisional restoration, periodontal corrective procedures cannot be correctly executed. It is only after meticulous caries removal, and a perfectly restored core as well as perio-restorative interface correction that a definitive restoration can be placed in a clean, dry and healthy environment that allows long term success. These principles can be applied to the simplest of single tooth ceramic crowns as well as the most complex perio-restorative full mouth reconstructions. Following this presentation, attendees should:

- Better understand a protocol for complete caries removal and placement of adhesive cores to serve as the biologic template for the perio-restorative architecture and footprint.
- Recognize requirements for therapeutic provisional restorations.
- Appreciate the treatment concept of reverse crown lengthening or biologic shaping to eliminate furcation defects and subgingival surface irregularities, correct biologic width issues, and provide adequate attached keratinized soft tissue to protect restorations.
- Be able to take advantages of post-periodontal 4 week relines.
- Understand a prescribed protocol for perfect margination, impressions, and placement of definitive restorations.
9:00-10:00  Dr. Michael J. Melkers – Hanover, New Hampshire

*Function, Parafunction and What the Function?!?... Forces that Threaten our Success*

Why do some beautiful smiles last? Why do others fail so fast?? Is there anything that can be done? Will we be proactive or reactive in our approach? Is bite position important-why and when does it matter? What is all of the debate about “function vs. parafunction”? Following this discussion, attendees should understand:

- Melding traditional & progressive diagnostics in risk assessment protocols.
- *Parafunctional analysis* as a real time insight into parafunction & failure.
- Protocols for confirming restorative jaw relationships.

.............. BREAK WITH EXHIBITORS (30 minutes) .................................................................

10:30-11:10  Dr. Timothy A. Hess – Auburn, Washington

*Implant Dentistry’s “Dirty Little Secret”*

Peri-implant disease in many cases can be related to dental cements and prosthetic design. The introduction of cement into subgingival tissues can be excluded utilizing aesthetic screw retained restorations or custom abutments that eliminate the crown/abutment interface below gingiva. Additional prosthetic design modifications to abutments can reduce the need for adhesive cements and facilitate use of water soluble cements that aid in detection and removal of excess cement. Following this presentation, attendees should:

- Be able to modify abutment design to improve retention and minimize peri-implant disease.
- Understand techniques to improve the aesthetics of screw retained restorations.
- Appreciate aesthetic custom abutment design aimed at eliminating subgingival margins.

11:15-12:00  Dr. Ricardo Mitrani – Mexico City, Mexico

*Challenges and Contingencies in the Restoration of Edentulous Patients*

This presentation will take a close look at contemporary fixed implant supported prosthetic alternatives for the edentulous patient. As in any other field of prosthetic dentistry, the treatment planning phase of treatment represents the culmination of a comprehensive diagnostic phase in which the clinician designs the route of treatment. A well thought out contingency plan should be considered for those patients exhibiting parafunctional activity. Key elements of Interdisciplinary clinical communication as well as laboratory communication will be described in order to ensure success. Following this lecture, attendees should appreciate:

- Treatment planning edentulous patients for fixed implant supported restorations.
- Advantages & shortcomings of different treatment options available.
- Contingency planning in the design of the edentulous dental reconstructions.

12:00-12:55  LUNCH WITH EXHIBITORS

1:00-1:55  Dr. James C. Kessler – Oklahoma City, Oklahoma

*Where Do Incisal Edges Go to Die and Can We Revive Them Predictably?*

A significant key to the comfort, function, and longevity of many of our restorations is a thorough understanding of anterior guidance. There has been a great deal of discussion over the years regarding the planning and execution of anterior restorations. An additional complicating factor today is trying to understand and best utilize the barrage of new materials available for our indirect anterior restorations. One vital component of the restorative process that is often overlooked is the diagnosis of how the existing circumstances occurred. In other words, we all too often go from problem identification to restoration planning without a diagnosis. In this presentation we will examine some of the common etiologies for incisal edge damage and how we might best design our restorative efforts to avoid a recurrence of the destruction. Following this lecture, attendees will:

- Appreciate the subtle as well as the more obvious types of incisal edge damage and to understand “where incisal edges go to die.”
• Be able to design future restorations to minimize the chances of continued destruction.
• Understand the impact of material selection on long term predictability of our restorative efforts.

2:00-3:00 Russell T. DeVreugd – Durham, North Carolina
Revisiting the Dynamic Spiral: The Occlusal Compass

This presentation will describe using the Occlusal Compass to provide proper function in regards to the “dynamic spiral.” Following this presentation, attendees should understand:
• Development of proper posterior and anterior function.
• Use of the occlusal compass to establish ideal anterior lingual and posterior occlusal morphology.
• How anterior occlusal morphology affects posterior occlusal morphology.
• Steps used to develop a predictable outcome, such as the role of the treatment plan wax-up, designing our provisional for function and esthetics, and selecting appropriate restorative materials.

……………….. BREAK WITH EXHIBITORS (30 minutes) ………………………………………………………………………………………………………

3:30-4:10 Dr. Markus Troeltzsch – Ansbach, Germany
Dr. Matthias Troeltzsch – Ansbach, Germany
Unexpected Complications in Dentistry — This Can Really Ruin Your Day

Changes in society, such as demographic developments and new body awareness, have resulted in an increasing number of medical concerns in the dental office. But we, as dentists, are not prepared for these changes. Medical issues do affect the success rate of our dental procedures and have legal implications that make us responsible for the safety and well-being of our patients. The objective of this lecture is to demonstrate how Medical Dentistry can influence the dentist’s success in the daily practice using the examples of peri-implantitis and the side effects of bisphosphonates. Following this lecture, attendees should appreciate:
• The etiology of extraordinary inflammation in the oral cavity.
• Background of the use of bisphosphonates and their mechanism of action.
• Prevention and treatment strategies for bisphosphonate osteonecrosis.
• If implants can be placed when the patient uses Bisphosphonates.
• Overview of available knowledge related to periimplantitis.
• Treatment strategies for periimplantitis.

4:15-5:00 Dr. Terry Donovan – Chapel Hill, North Carolina
Wear of Enamel and Restorative Materials

Dentists are seeing many patients with advanced wear. Wear is clearly multifactorial with bruxism and erosion as major etiologic factors. However, mechanical abrasion related to restorative materials is also an etiologic factor. This presentation will evaluate the scientific literature related to wear of enamel and restorative materials. It will demonstrate that the evidence base related to wear is weak and explain why more controlled clinical trials have not been conducted. It will evaluate evidence gleaned from in vitro studies and also explain why data from multi-million dollar “wear centers” is of limited value when attempting to predict clinical performance. Finally, suggestions regarding materials selection in specific clinical settings will be given. Following this lecture, attendee should better understand:
• The relative rates of wear produced by restorative materials.
• Which materials to choose in specific clinical situations.
• That wear of enamel is a multifactorial process involving both patient and material factors.
• That the least abrasive dental ceramic is 10 times more abrasive to enamel than gold.

5:00 Dr. David Cagna, IAG Program Chair – Closing of the Scientific Session

7:00-10:00 FORMAL GALA DINNER-DANCE
Reserve Speakers

Reserve Dr. Michael A. Mansueto – San Antonio, Texas

Dental Loupes Magnification

A review of optical principles in loupe magnification will be presented. The use of loupes in support of operator posture will be strongly reinforced. The benefits of coaxial, supplemental illumination will be discussed. Following this lecture, attendee should:

- Understand the benefits of each major classification of loupes magnification.
- Appreciate the ergonomic benefits provided by loupes magnification.
- Be able to evaluate currently used loupes to ensure proper fit to the operator.
- Understand the benefits of coaxial, auxiliary illumination provided by LED headlights.

Reserve Dr. Lane Ochi – Beverly Hills, California

Understanding Color and Shade Matching in Dentistry

Color is an integral part of esthetic dentistry. If the color of a restoration is off, the mistake can be glaringly evident and the result is an unhappy patient. Most dental schools do not do an adequate job in teaching color theory. Color theory is a language that conceptually and perceptually describes the elements of color and their interactions. Unfortunately, understanding color is tricky. Slight variances in shade play with our eyes, our minds, and, ultimately, our dentistry. The illumination in the dental treatment room, optical illusions, color blindness, and fatigue are among the dental professional’s ongoing obstacles to successful shade matching. This presentation will attempt to enlighten the dentist and ceramist on the dimensions of color, the effect of metamerism and other phenomenon. Fluent in the language of color, we can sharpen our perception of color, better understand existing color dynamics make better predictions, and communicate more clearly about color. Following this presentation, attendees should appreciate:

- The interactions of light, color, color perception and shade matching.
- Difference between additive and subtractive color theory.
- The phenomenon of metamerism, and how it can act as a complicating factor in shade selection.
- How to make chairside shade modifications like translucency alteration, adding maverick colors, and shade shifts.
- How and why camera light meters and our own visual system cannot be trusted.
- Three simple tricks to improve your ability to select the most correct color.