

CLINICALLY RELEVANT & EVIDENCE BASED

Bone Symposium: 2014

CLINICALLY RELEVANT & EVIDENCE BASED

Sponsored by



Dr. Fouad Khoury



Dr. Robert Marx



Dr. Craig Misch



Dr. Marc Nevins



Dr. Myron Nevins



Dr. Michael Pikos



Dr. George Romanos



Dr. Massimo Simion



Dr. Dan Spagnoli



Dr. Paolo Trisi



Dr. Istvan Urban



Dr. Hom-Lay Wang

Ritz-Carlton Grande Lakes
Orlando, Florida
October 9-11, 2014

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Bone Symposium 2014

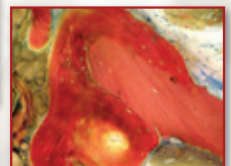
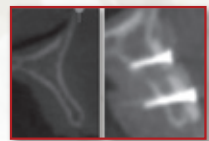
Dear Colleague,

I want to personally invite you to attend the Pikos Institute sponsored Bone Symposium 2014. This **one of a kind program** will feature **12 of the world's master clinicians** as they share their respective bone grafting protocols in a most unique mode. **Each speaker will have two hours to present their material including 20 minutes of direct Q&A from the audience.** This format will allow each speaker ample time to develop his respective topic as well as provide for audience participation.

This symposium is for both entry level and advanced level clinicians who desire to advance their knowledge of clinically relevant and evidence based state of the art bone grafting procedures. It will cover the **entire spectrum** of both the **scientific** and **clinical elements** of **bone grafting for implant**

reconstruction from **autogenous bone grafting to tissue engineering based bone grafting.** **Bone Symposium 2014** will include, but is not limited to, the following topics:

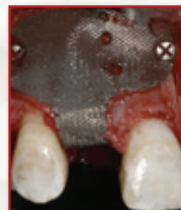
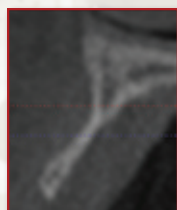
- Critical evaluation of the available evidence relative to various bone graft techniques
- The effects of surgical technique on bone healing
- Techniques for the use of autogenous bone grafting to minimize morbidity and increase treatment outcome
- Autogenous bone grafting for 3D alveolar ridge augmentation
- The benefits of tissue engineering (use of growth factors, stem cells, and constructs) and de novo bone formation
- In situ tissue engineering protocols
- Selection of appropriate biologics for regenerative procedures
- Comprehensive use of rhBMP-2 for bone grafting
- Comprehensive use of rhPDGF for bone grafting
- Tissue engineering for 3D alveolar ridge augmentation
- Immediate load protocols for alveolar ridge bone grafting
- Comprehensive extraction site management – decision tree and clinical application
- Sinus bone grafting
- Single tooth to full arch reconstruction with autogenous bone grafting
- Single tooth to full arch reconstruction with tissue engineering based bone grafting
- Horizontal and vertical alveolar ridge bone grafting
- Complications of autogenous and tissue engineering based bone grafting



Please join us at the Ritz-Carlton Orlando for what will be a unique and total immersion learning experience on all aspects of the science and art of bone grafting for implant reconstruction. This will be the **most comprehensive bone grafting symposium you will ever attend.** Come and learn from these talented world-class master clinicians. You don't want to miss this great opportunity.

Best Regards,

Michael A. Pikos, DDS



Program Schedule

Day 1: Thursday – Autogenous Bone Grafting

7:00 am – 7:45 am Registration/Breakfast

7:45 am – 8:00 am Introductions

8:00 am – 10:00 am Dr. Fouad Khoury Oral Rehabilitation in Patients with Severe Bone Loss: Surgical Approach with Autogenous Bone Grafts and Long Term Results

10:00 am – 10:30 am Morning Break

10:30 am – 12:30 pm Dr. Craig Misch Autogenous Bone Grafting 2014: Perspectives, Indications and Techniques

12:30 pm – 1:45 pm Lunch

1:45 pm – 3:45 pm Dr. George Romanos Immediate Loading and Bone Grafting: Prerequisites for Clinical Success

3:45 pm – 4:15 pm Afternoon Break

4:15 pm – 6:15 pm Dr. Paolo Trisi 20 Year Histologic Experience with Different Peri-Implant Bone Grafting Materials, Techniques and Implants

Day 2: Friday – Tissue Engineering

7:00 am – 8:00 am Breakfast

8:00 am – 10:00 am Dr. Hom-Lay Wang Current Advances in Socket and Horizontal Bone Augmentation

10:00 am – 10:30 am Morning Break

10:30 am – 12:30 pm Dr. Michael A. Pikos Evolution of Regenerative Strategies for Intraoral Bone Grafting: Fourteen Clinical Applications of rhBMP-2

12:30 pm – 1:45 pm Lunch

1:45 pm – 3:45 pm Dr. Robert Marx In-Situ Tissue Engineering Achieves Extensive Ridge Augmentation Without Autogenous Bone

3:45 pm – 4:15 pm Afternoon Break

4:15 pm – 6:15 pm Dr. Daniel Spagnoli The Applications of Tissue Engineering for Pre Implant Reconstruction of Major and Minor Alveolar Ridge Defects

Day 3: Saturday – Tissue Engineering

7:00 am – 8:00 am Breakfast

8:00 am – 10:00 am Dr. Ron Nevins Osteogenic Treatment Planning for Your Patients: Materials and Methods

10:00 am – 10:30 am Morning Break

10:30 am – 12:30 pm Dr. Marc Nevins Innovations for Esthetic Implant Surgery with Growth Factors

12:30 pm – 1:45 pm Lunch

1:45 pm – 3:45 pm Dr. Massimo Simion Horizontal and Vertical Ridge Augmentation: Current Techniques and Long Term Results

3:45 pm – 4:15 pm Afternoon Break

4:15 pm – 6:15 pm Dr. Istvan Urban New Perspectives on Vertical and Horizontal Augmentation

Thursday October 9, 2014 – Autogenous Bone Grafting



8:00 am – 10:00 am Dr. Fouad Khoury

Oral Rehabilitation in Patients with Severe Bone Loss: Surgical Approach with Autogenous Bone Grafts and Long Term Results

Autogenous bone is still considered the gold standard for intraoral bone grafting. This presentation will focus on using a split cortical bone block protocol (SBB) that allows for predictable reconstruction of both horizontal and vertical defects of the maxilla and mandible. Ten year results using more than 1300 bone grafts for three dimensional defects will be featured.

Learning Objectives:

- Understand the application, indications and surgical protocol for using the split bone block technique (SBB) for alveolar ridge bone grafting
- Understand the role of soft tissue management for long-term success of autogenous bone block grafting for three-dimensional reconstruction
- Prevent and manage intraoperative and post operative complications using autogenous bone blocks for three-dimensional reconstruction

Morning Break 10:00 am – 10:30 am



10:30 am – 12:30 pm Dr. Craig Misch

Autogenous Bone Grafting 2014: Perspectives, Indications and Techniques

For historical and biologic reasons autogenous bone has long been considered the gold standard of bone graft materials. For bone augmentation procedures in preparation for dental implants, autogenous grafts provide predictable volume gains and favorable bone quality with short healing periods. However, the need to harvest the graft with associated morbidity is an inherent disadvantage that has caused many clinicians to abandon the use of autograft. The choice of a technique for bone augmentation is dependent on a number of factors including ridge morphology, degree of atrophy, bone volume requirements and clinician preference. This presentation will provide contemporary indications for using autogenous graft and review cases that exhibit clinical techniques for graft harvest and augmentation.

Learning Objectives:

- Understand the advantages of using autogenous bone
- Identify cases that autogenous bone may be preferred
- Understand techniques to decrease morbidity and enhance outcomes

Lunch 12:30 pm – 1:45 pm



1:45 pm – 3:45 pm Dr. George Romanos

Immediate Loading and Bone Grafting: Prerequisites for Clinical Success

Immediate functional loading to reduce treatment time is a treatment option with long-term success when certain guidelines are followed. This lecture presents the possibilities of bone grafting in conjunction with immediate loading in edentulous ridges and in cases with immediate implants or sinus augmentations using various prosthetic possibilities. Implant design characteristics and drilling protocols provide important requirements for long-term success when bone quality is compromised. Long-term data has proven that the treatment period for implant rehabilitation can be minimized using immediate loading concepts.

Learning Objectives:

- To explain better the role of remodeling around immediately loaded implants
- To emphasize the role of implant design and bone stability for advanced immediate loading protocols
- To evaluate long term data of advanced surgical techniques using immediate loading

Afternoon Break 3:45 pm – 4:15 pm



4:15 pm – 6:15 pm Dr. Paolo Trisi

20 Year Histologic Experience with Different Peri-implant Bone Grafting Materials, Techniques and Implants

After reviewing the general principles of bone healing and formation with special emphasis on timing and modalities the effect of adding different bone grafts on healing will be reviewed based on the presenter's personal histologic studies. Healing after grafting with autografts, allografts, xenografts, and synthetic materials will be analyzed. Sinus floor elevation techniques and grafts will be addressed as well as sinus membrane perforation and its effect on bone graft healing. The effect of implant placement, simultaneous vs staged, implant surface treatment, and different grafts on osseointegration development will be featured in addition to the effect of loading on long term graft remodeling.

Learning Objectives:

- Understand the effects of surgical technique on bone healing
- Critically evaluate the available evidence relative to various grafting and augmentation techniques
- Understand the rationale for selecting implant placement in a staged or simultaneous approach

Friday October 10, 2014 – Tissue Engineering



8:00 am – 10:00 am Dr. Hom-Lay Wang

Current Advances in Socket and Horizontal Bone Augmentation

Implant site development is performed at time of extraction and during implant placement to prevent ridge resorption as well as to augment ridge width and height for better implant placement and esthetic outcome. Bone grafting, either horizontal or vertical, is often needed to facilitate ideal implant placement. Techniques currently available for horizontal bone augmentation include, but are not limited to, guided bone regeneration (i.e., sandwich bone augmentation), monocortical only graft (either auto- or allo-genic), and ridge split/expansion. This presentation will briefly discuss these approaches. This presentation will focus on a "decision tree" that will allow clinicians to choose the most predictable procedure for socket management (e.g., Colla-plug and PTFE techniques) and horizontal bone augmentation (e.g., GBR with tenting and sandwich bone augmentation).

Learning Objectives:

- Become familiar with decision making of how to select certain techniques for socket augmentation
- Recognize the decision tree for selecting proper augmentation technique
- Be familiar with sandwich bone augmentation, allo- and autogenic block graft and ridge split/expansion for horizontal bone augmentation

Morning Break 10:00 am – 10:30 am



10:30 am – 12:30 pm Dr. Michael A. Pikos

Evolution of Regenerative Strategies for Intraoral Bone Grafting: 14 Clinical Applications of rhBMP-2

This presentation will focus on the clinical application of rhBMP-2 for intraoral bone grafting for implant placement in a private practice setting. The presenter will draw from his six-years of experience with this potent morphogen-mitogen that includes more than 250 cases. The science, indications, procedural protocols, limitations, and complications of using this recombinant protein will be featured. Comprehensive case presentations will be presented via PowerPoint and HD video clips and will include step by step surgical protocol, histology, and 5-year post-prosthetic completion follow-up.

Learning Objectives:

- Understand the science, indications and surgical protocol for the use of rhBMP-2 for intraoral bone grafting
- Understand fourteen clinical applications of rhBMP-2 for intraoral bone grafting
- Understand the limitations and complications of rhBMP-2 for intraoral bone grafting

Lunch 12:30 pm – 1:45 pm



1:45 pm – 3:45 pm Dr. Robert Marx

In-Situ Tissue Engineering Achieves Extensive Ridge Augmentation Without Autogenous Bone

In-situ tissue engineering has become a practical and predictable method for bone regeneration for vertical and horizontal augmentation as well as for sinus augmentation. A composite graft of recombinant human bone morphogenetic protein in an acellular collagen sponge (rhBMP-2/ACS), platelet rich plasma (PRP), and cancellous freeze dried allogeneic bone (CFDAB) satisfies the tissue engineering principles of signal, cells, and matrix required to regenerate tissue. This composite graft proves to be time and cost effective in regenerating implantable bone for dental rehabilitation and is capable of regenerating large volumes of bone without harvesting autogenous bone. This method of in-situ tissue engineering has also been effective in regeneration of continuity defects of the mandible.

Learning Objectives:

- To define the principles of in-situ engineering
- To relate the surgical details of bone regeneration using in-situ tissue engineering
- To demonstrate predictable outcomes from in-situ tissue engineering

Afternoon Break 3:45 pm – 4:15 pm



4:15 pm – 6:15 pm Dr. Daniel Spagnoli

The Applications of Tissue Engineering for Pre Implant Reconstruction of Major and Minor Alveolar Ridge Defects

This presentation will briefly cover tissue engineering (TE) and de-novo intramembranous bone formation in adult human alveolar ridge defects. The merits of native bone as an important concept for osseointegration and implant stress strain maintenance of bone will be explained. Surgical approaches to deficient alveolar ridge segments, flap development, and the principles of flap vascularity will also be covered. A case by case approach will be used to demonstrate reconstruction of vertical and width alveolar ridge deficiency. Finally, a series of osteotomies for interpositional grafting, mesh techniques, and major osteotomies including the LeFort I for major maxillary deficiencies will be reviewed.

Learning Objectives:

- Understand the benefits of tissue engineering (the use of growth factors, stem cells, and constructs) and de-novo bone formation
- Extend the concept of osseointegration beyond integration to bone maintenance by the implant
- Review the principles and benefits of interpositional grafting within osteotomy sites, versus onlay approaches with mesh space maintenance

Saturday October 11, 2014 – Tissue Engineering



8:00 am – 10:00 am Dr. Ron Nevins

Osteogenic Treatment Planning for Your Patients: Materials and Methods

Although the paradigm of dental treatment has been remarkably expanded by the application of osseointegration for the partially edentulous patient, an inadequate volume of bone continues to preclude implants for many. A series of surgical procedures has emerged to develop ample bone for the ensuing project employing autografts, allografts, and alloplasts with and without barrier membranes. Many clinicians combine these with rh-2 bone morphogenetic protein (rhBMP-2) or rh platelet derived growth factor-BB empowering the results. The end point question is: can we place implants that will support the occlusal load? This presentation will include preclinical and clinical observations.

Learning Objectives:

- Learn to select the appropriate biologics for regenerative procedures
- Understand the introduction of growth factors to the regenerative equation
- Establish the optimal regenerative end point goals for implant placement

Morning Break 10:00 am – 10:30 am



10:30 am – 12:30 pm Dr. Marc Nevins

Innovations for Esthetic Implant Surgery with Growth Factors

This presentation will provide a clinical update on esthetic implant site development. The utilization of recombinantly engineered platelet-derived growth factor-BB (rhPDGF-BB) has accelerated the trend toward minimally invasive surgical procedures to preserve and enhance the esthetic foundation for dental implant restorations.

Learning Objectives:

- Understand the use of growth factor technology to reduce the need for autogenous bone grafting and allow for minimally invasive procedures
- Understand how to apply tissue engineering to clinical decision-making to achieve optimal biologic and esthetic results for challenging dental implant cases
- Understand techniques utilizing rhPDGF-BB for combined hard and soft tissue grafting

Lunch 12:30 pm – 1:45 pm



1:45 pm – 3:45 pm Dr. Massimo Simion

Horizontal and Vertical Ridge Augmentation: Current Techniques and Long Term Results

The future is moving towards an era where less invasive treatment regimes are now available to minimize complications and side effects of surgical procedures, decrease patient morbidity, increase success rates and decrease technical difficulties. The maturation of tissue engineering and its application to clinical surgical procedures has helped create a new paradigm with tissue engineering based bone grafting.

Learning Objectives:

- To identify the correct clinical indications and pre-requisites for successful vertical ridge augmentation therapy
- To understand the history and development of techniques over the past two decades that involve the rationale of applying tissue engineering principles of vertical augmentation
- To understand the endpoints of a successful "state of the art" surgical protocol for 3D alveolar ridge augmentation including patient management

Afternoon Break 3:45 pm – 4:15 pm



4:15 pm – 6:15 pm Dr. Istvan Urban

New Perspectives on Vertical and Horizontal Augmentation

Vertical and horizontal augmentation presents one of the greatest challenges of bone regeneration in implant dentistry. Patient selection, patient preparation for surgery, precise surgical techniques, and postoperative management are the key factors in reducing the rate of bone graft complications. Recent research on vertical ridge augmentation as well as the use of different growth factors in conjunction with bone grafts will be presented.

An exciting new treatment modality of ridge augmentation treating edentulous atrophic maxillary ridges will be introduced. Utilizing these procedures may lessen the need for autogenous bone and may generally lead to decreased morbidity. Increased patient comfort and satisfaction associated with these regenerative procedures may also be achieved.

Learning Objectives:

- Understand Indications, patient selection and treatment alternatives for vertical and horizontal augmentation
- Learn the principles of the surgical protocol for vertical and horizontal alveolar ridge augmentation
- Understand why scientific documentation is superior compared to anecdotal techniques



Pikos Institute has contracted with the
Ritz-Carlton Grande Lakes in Orlando, Florida
 to provide a special room rate for our Bone Symposium attendees of \$209 per night.

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For reservations by phone, call:
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Mention "Bone Symposium" for special room rate.



Pikos Institute Bone Symposium Registration

Early Registration \$2695 US (ends June 15, 2014) Regular Registration \$2995 US

☐ Please register me for the Pikos Institute Bone Symposium October 9-11, 2014 in Orlando, Florida

My specialty is: ☐ Oral Surgeon ☐ Periodontist ☐ Prosthodontist ☐ General Practitioner ☐ Other

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To register by phone: 727-781-0491

To register online: www.PikosSymposium.com

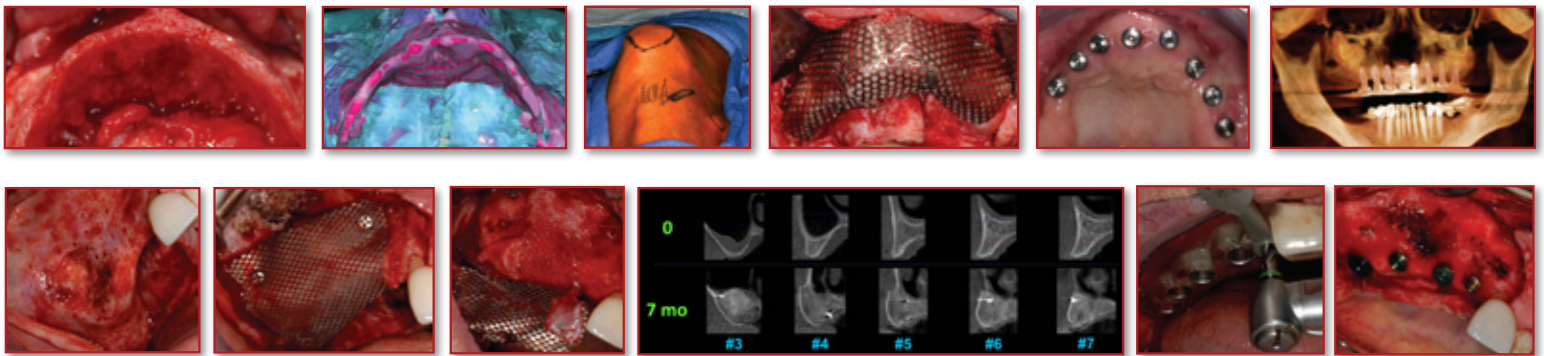
Mail registration to: Pikos Institute, 2711 Tampa Road Palm Harbor, FL 34684

Cancellations must be made in writing by September 1, 2014 to receive a refund. After September 1, 2014 there will be a \$1000 cancellation fee.
 A \$25 administrative fee will be charged for substituting a registrant.

Pikos Institute reserves the right to refuse registration and to cancel or modify the conference without prior notice.
 Pikos Institute is not responsible for reimbursing prepaid (including non-refundable) customer travel costs. It is recommended that attendees who elect to incur travel costs to attend, schedule and purchase airfare and hotel accommodations with this in mind.

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 Palm Harbor, FL 34684
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Exhibitors

