



**HARVARD**  
School of Dental Medicine

# Advanced Education in Implant Dentistry

OCT~Nov  
2021

## Contact

Dr. David Kim





Located in the heart of Boston's Longwood Medical Area, Harvard School of Dental Medicine (HSDM) ranks as one of the preeminent schools of dental medicine in the country. HSDM educates clinicians, educators, researchers, and leaders in the profession; boasts core strength in musculoskeletal-disease research; and offers students public health opportunities in local communities and across the globe.

The mission of the Harvard School of Dental Medicine (HSDM) is to develop and foster a community of global leaders dedicated to improving human health by integrating dentistry and medicine at the forefront of education, research, and patient care.

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Course participants will have an opportunity to interact with highly skilled periodontists, oral surgeon, and prosthodontist who are recognized experts in restoring challenging cases. Participants will be introduced to diverse treatment planning philosophies as well as proven surgical and restorative techniques. Participants will become familiar with various diagnostic and treatment protocols that have been demonstrated to be predictable.

The overall objectives of the course are:

1. To present current and emerging concepts of treatment planning for natural dentition and dental implants
2. To present innovative biomaterials, surgical, and restorative techniques to treat complex cases with successful clinical outcome

## Contact

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## Program Schedule

October, 2021

**16** Saturday

### Building Bone in Implant Dentistry

07:00  
-  
08:30  
  
AM

**Achieving Predictable Ridge  
Augmentation Outcomes**

Dr. Jerry Lin

**23** Saturday

### The Art of Esthetic Soft Tissue Augmentation Procedures

**Peri-Implant Soft Tissue  
Dehiscence:  
Prevention and Treatment**

Dr. Lorenzo Tavelli

**30** Saturday

### Building a Solid Foundation in Prosthodontics

**Esthetic Anterior  
Dental Implant Restoration**

Dr. Miguel Vidal

08:30-08:45 AM **BREAK**

08:45  
-  
10:00  
  
AM

**Overcoming Challenges of  
Vertical Bone Augmentation**

Dr. Isabella Rocchietta

**Soft Tissue and Hard Tissue  
Considerations in Demanding  
Esthetic Implant Dentistry**

Dr. Luca Gobatto

**Surgical Considerations in  
Implant Dentistry- Clinical  
Challenges and Long-Term  
Success**

Dr. Alex Yi-Min Tsai



## Program Schedule

November, 2021

# 13

Saturday

### CAD/CAM Implant Dentistry

06:00

-

07:30

AM

**3D Technology in  
Periodontics and Implant  
Dentistry**

Dr. Chia-Yu Chen

07:30-07:45 AM **BREAK**

07:45

-

09:00

AM

**Digitally Guided Complex  
Hard and Soft Tissue  
Augmentation Procedures**

Dr. Yong-Han Koo

# 20

Saturday

### Team Approach in Implant Dentistry

**Peri-Implant Diseases:  
Differentiated Non-Surgical  
Protocols**

Dr. Marisa Roncati

**Surgical Management of  
Dental Implant Complications**

Dr. Stefano Parma-Benfenati





# Speakers

Oct-Nov, 2021



Dr. Jerry Lin



Dr. Lorenzo Tavelli



Dr. Miguel Vidal



Dr. Chia-Yu Chen



Dr. Marisa Roncati



Dr. Isabella Rocchietta



Dr. Luca Gobbato



Dr. Alex Tsai



Dr. Yong-Han Koo



Dr. Stefano Parma-  
Benfenati



## Course Abstract

10/16 (Sat) 07:00-08:30 am (ET)



**Jerry Lin, DDS, DMSc**

**Harvard School of Dental Medicine**

### **Achieving Predictable Ridge Augmentation Outcomes**

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It has long been a challenge for dental clinicians to predictably augment the atrophic alveolar ridge horizontally and vertically for implant therapies. Various techniques have been developed to overcome these obstacles. This lecture will begin with the tissue engineering standpoints as well as biological considerations and further lead to the decision-making for utilizing proper surgical techniques for achieving ridge augmentation. Specific surgical interventions and techniques used to optimize the treatment outcomes will be addressed. This lecture aims to deliver a solid biologic basis and provide clinical guidelines by which ridge augmentation can be predictably achieved.

#### Learning Objectives:

- To identify different types of alveolar ridge defects
- To learn different techniques for obtaining ridge augmentation
- To make clinical decisions for treating ridge defects



## Course Abstract

10/16 (Sat) 08:45-10:00 am (ET)



**Isabella Rocchietta, DDS, MSc**

**UCL Eastman Dental Institute (UK)**

### **Overcoming Challenges of Predictable Vertical Bone Augmentation**

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Alveolar defects compromise the “prosthetically-driven” dental implant positioning unless a detailed planning is performed prior to the surgical phase. Many techniques have been used to augment alveolar bone, including autogenous block grafts, titanium mesh, distraction osteogenesis and guided bone regeneration (GBR). The use of GBR associated with non-autogenous scaffolds constitutes the standard of care of bone augmentation in all alveolar defects with or without implants, including the most severe vertical deficiencies. Choosing the correct therapeutic approach with the appropriate biomaterials is essential to achieving success in advanced GBR procedures.

#### **Learning Objectives:**

- To understand the biological principle of GBR in its clinical applicability
- Learn tips and tricks on how to perform vertical GBR in severe defects
- Learn how to avoid and manage complications in GBR



## Course Abstract

10/23 (Sat) 07:00-08:30 am (ET)



**Lorenzo Tavelli, DDS, MS**

**Harvard School of Dental Medicine**

### **Peri-Implant Soft Tissue Dehiscence: Prevention and Treatment**

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The significance and idea of having certain amount of the keratinized mucosa at implant sites have been evolving and challenged over the years. Recently soft tissue management has become a key issue when placing dental implants and when dealing with soft tissue deficiencies around implants presented with thin mucosa. This lecture will discuss different treatment protocols to achieve the desired results.

#### Learning Objectives:

- To understand the importance of the keratinized mucosa around implants
- To learn when to use a gingival graft and a connective tissue graft
- To learn about alternatives to autogenous grafts by using xenogeneic collagen substitutes



## Course Abstract

10/23 (Sat) 08:45-10:00 am (ET)



**Luca Gobbato, DDS, MS, PhD**

**Harvard School of Dental Medicine**

### **Soft Tissue and Hard Tissue Considerations in Demanding Esthetic Implant Dentistry**

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Since implant dentistry has become a common treatment for replacing missing teeth, dentists have been trying to mimic natural tooth morphology in order to achieve both functional results and to fulfill the patient's esthetic desires. This presentation will focus on the management of the hard and soft tissue around dental implants and analyzing the characteristics of different periodontal phenotypes. We will discuss basis concepts regarding immediate implant placement and guided bone regeneration procedure related to the esthetic zone before focusing on the soft tissue management.

#### Learning Objectives:

- To learn to identify different periodontal phenotypes
- To learn to identify limiting factors regarding an optimal esthetic result
- To learn to select the ideal treatment option for different indications



## Course Abstract

10/30 (Sat) 07:00-08:30 am (ET)



**Miguel Vidal, DMD, MS**

**Harvard School of Dental Medicine**

### **Esthetic Anterior Dental Implant Restoration**

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As the predictability of implant therapy has increased, patients' esthetic expectations levels have risen as well. The implant restoration needs to integrate seamlessly with the natural dentition. An understanding of proper treatment sequencing is critical to achieve a highly successful esthetic outcome. Intimate coordination between the precise surgical aspect and the restorative phase is paramount in achieving consistent esthetic restorations. Participants will learn different treatment protocols that can be employed to achieve the desired esthetic outcomes.

#### Learning Objectives:

- To identify esthetic risk factors for natural teeth and implants
- To understand the impact of treatment timing between the surgical aspect and the restorative outcome
- To recognize the role of implant provisionals in creating and maintaining soft tissue contours for implant esthetics
- To review the role of implant-abutment interface in prosthetic success



## Course Abstract

10/30 (Sat) 08:45-10:00 am (ET)



**Alex Yi-Min Tsai, DDS, DMSc**

**National Taiwan University**

### **Surgical Considerations in Implant Dentistry- Clinical Challenges and Long-Term Success**

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In the 21st century, the impact of implant dentistry as a whole is still constantly reshaping every aspects of clinical and academic dentistry. This presentation will discuss topics that are crucial to our daily implant practices and the challenging issues involving surgical implant treatment in particular in the esthetic zones. Factors such as biological, surgical, implant design and prosthetic procedures as well as patient compliances in addition to close co-operations of clinicians and technicians have to be considered in order to achieve the satisfactory long-term results.

#### **Learning Objectives:**

- Evaluation and treatment planning of implant surgery
- Timing of implant surgery – immediate? early? delay? staged?
- Predictability and long-term success of implant surgery
- Importance of periodontal and implant maintenance care



## Course Abstract

11/13 (Sat) 06:00-07:30 am (ET)



**Chia-Yu Chen, DDS, DMSc**

**Harvard School of Dental Medicine**

### **3D Technology in Periodontics and Implant Dentistry**

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With the advent of digital dentistry, clinicians find themselves inundated with new materials, hardware and software in daily practice. A thorough comprehension of the technologies will help us integrate digital solutions to promote communication, as well as accelerating treatment processes and optimizing treatment outcomes. This presentation will allow dentists to become familiar with the digital workflow, with an emphasis on the implementation of the additive manufacturing, namely 3D printing technology in practice. The various 3D printing technologies (FDM, SLA and DLP) and their pros and cons will be discussed. Clinical scenario will be presented to demonstrate their respective indications.

#### Learning Objectives:

- To understand the digital workflow for implant dentistry
- To discuss the various 3D printing technologies available in dentistry
- To be able to incorporate 3D printing in clinical practice



## Course Abstract

11/13 (Sat) 07:45-09:00 am (ET)



**Yong-Han Koo, DDS**

**Harvard School of Dental Medicine**

### **Digitally Guided Complex Hard and Soft Tissue Augmentation Procedures**

Guided bone and tissue regeneration techniques have revolutionized clinicians' abilities to treat a wide array of clinically challenging situations, ranging from mild to severe bone and soft tissue defects. This presentation will discuss efficient and precise methods of identifying various risk factors and prognosis at the time of initial consultation utilizing advanced digital technologies. Surgical treatment modalities to restore form and function that satisfy the evidence-based criteria for long-term stability will be addressed. Esthetically and clinically demanding areas of the anterior maxilla, as well as the posterior mandible, will be emphasized. Complications and their management will also be discussed.

#### **Learning Objectives:**

- Understand the key determining factors for long-term success criteria: Survival vs. Success
- Describe Stage I, II, and III surgical protocols
- Perform various surgeries using digitally guided bone and soft tissue regeneration techniques
- Utilize growth factors to enhance both the alveolar bone and soft tissue defects and overcome dental implant complications



## Course Abstract

11/20 (Sat) 06:00-07:30 am (ET)



**Marisa Roncati, BS, RDH, DDS**

**Bologna University (Italy)**

### **Peri-Implant Diseases: Differentiated Non-Surgical Protocols**

The non-surgical approach has proven to be effective in mucositis. In peri-implantitis with progressive and irreversible bone loss, the site-specific non-surgical phase should always be the initial treatment of choice. Numerous clinical images, drawings and videos related to clinical cases with follow-up will illustrate how to obtain an effective decontamination/detoxification of the implant surface with innovative materials for multiple antimicrobial approaches. This will be demonstrated by applying differentiated protocols used to maintain peri-implant tissue health and in the treatment of mucositis and/or peri-implantitis.

#### **Learning Objectives:**

- To prevent peri-implantitis and to plan for long-term success
- To be capable of implementing differentiated protocols to treat mucositis or peri-implantitis
- To provide a maintenance program for each patient emphasizing oral hygiene to achieve long-term oral health



## Course Abstract

11/20 (Sat) 07:45-09:00 am (ET)



**Stefano Parma-Benfenati, MD, DDS, MScD**

**Parma University (Italy)**

### **Surgical Management of Dental Implant Complications**

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Different dental implant complications do arise, such as malpositioned implants with and without biologic damages, gingival recessions, and catastrophic clinical outcomes. The treatment of these severe complications requires complex multidisciplinary treatment associated with a high biological price for the patient. Early intervention and correct diagnosis are crucial factors; however, very limited scientific evidence are available to select an adequate surgical treatment plan. Several clinical cases with a long-term survival follow-up, strategies, clinical protocol, and techniques with a “step-by-step” approach will be presented.

#### Learning Objectives:

- To understand the importance of a correct and early diagnosis
- To discuss the various therapeutic solutions and their biological implications
- To learn: 1) the different therapeutic solutions for the treatment of malpositioned implants; 2) gingival recession treatment; 3) how to manage catastrophic dental implant complications
- To discuss the predictability and longevity of clinical results