

REGISTRATION PACKET

**ACADEMY OF
OSSEOINTEGRATION
ANNUAL MEETING**

★ ★ ★
**Current Factors in
Clinical Excellence**

★ ★ ★
March 13-16, 2019
WASHINGTON, DC



Greetings from the Program Chair



Franck Renouard, DDS

On behalf of the 2019 Annual Meeting Program Committee, I am very pleased and honored to invite you to join us in Washington, DC for the **34th Annual Meeting of the Academy of Osseointegration (AO), March 13-16, 2019**. This year the theme is **"Current Factors in Clinical Excellence."** Our goal is to blend science and clinical reality to answer the

questions that all members of clinical teams ask every day. Moderators will be catalyzing the speakers to offer the best of their knowledge and experience during the panel discussions that will take place at the end of the sessions. Enthusiasm, energy, sharing, respect, science, discussions: such are the pillars of the 2019 Meeting. For this meeting the regional focus will be Europe and we are pleased to present a significant selection of Europe's finest speakers.

The meeting begins on March 13th with several **Hands-on Workshops** and two half-day **Pre-conference Courses** designed to be comprehensive reviews and to fulfill some of the requirements for the AO Certificate in Implant Dentistry.

Several themes will be discussed during the three days. On Thursday afternoon, we begin with the **Opening Symposium**, which will be led by AO past President Dr. Steven Eckert. Important questions will be answered by five recognized experts: What can we learn from orthopedic osseointegration? Was implant dentistry better and safer before? Can scientific literature really help us improve our practice? Will the future diagnostic tools of dentistry be only computers? Is human behaviour the key to success in implant dentistry? To answer this last question, who better than Dr. Mark Pinsky who divides his time between the chair of his dental office and the cockpit of a commercial aircraft as a captain?

Friday morning will begin with **Morning with the Masters**: a privileged hour to meet with experts who will share their experience. Drs. Maurício Araújo, J.E. Davies, Steven Eckert, German Gallucci, William Giannobile, Petra Gierthmühlen, Dennis Rohner, Daniel Spagnoli, Pascal Valentini and Terry Walton will cover topics ranging from sinus lift complications, bioengineering, and biomaterials used in implant prostheses. These sessions are designed to allow for direct interaction between the speaker and audience around core topics in implant rehabilitation.

Friday morning will continue with two Plenary Sessions **"10 Years After."** The concept is for experienced clinicians to describe what they were doing 10 years ago and what they are doing today. They will then have to explain why they have changed techniques, protocols or indications during these 10 years. The **"10 Years After"** session will apply to both surgery and prosthetics. The topics include: 10 years after in vertical

ridge augmentation, 10 years after in augmentation using biologics, 10 years after in complex treatments, 10 years after in esthetic material, and 10 years after connecting or not connecting the implants. All 14 topics addressed during this session will answer the clinical and scientific questions that all clinicians ask themselves, whatever their specialty. The prosthetic and surgical tracks will be moderated by AO past Presidents, Stephen Parel and Edward Sevetz, Jr., respectively.

Following the AO's tradition of supporting research and innovation, the **Oral Clinical Research** session will be held Friday morning and the **Oral Scientific Research** and **Clinical Innovations** sessions will be presented Friday afternoon.

Friday afternoon, the Academy returns to the science that underpins implant dentistry by featuring sessions on peri-implant bone biology. J.E. Davies will organize and moderate a session entirely devoted to **"Osseointegration: Restoration of Homeostasis or a Foreign Body Response?"** This seemingly theoretical question is required if we want to optimize outcomes and prevent complications. The three experts: Drs. Saso Ivanovski, Rene Olivares-Naverrete and Omar Omar are preparing an excellent discussion on the bone biology and physio-pathology around implants.

Parallel to this session on bone, three teams of surgeons/prosthodontists will present the latest developments in complex maxillofacial rehabilitation, representing what is possibly the most challenging domain in implant dentistry. Dr. Dennis Rohner will moderate this session and bring context to the discussion of his colleagues.

Following the afternoon break, the first session is dedicated to peri-implant soft tissue. What material should be used to manage the lack of keratinized tissue around implants? Can we consider materials replacing the connective tissue? What are the limitations to using soft tissues in establishing a healthy and aesthetic peri-implant environment? What is the future of regenerative medicine around implants? Drs. Sofia Aroca, Daniel Thoma and William Giannobile will each make their clinical proposals before debating during the panel discussions under the direction of moderator and AO past President Dr. Clarence Lindquist.

The second session will focus more on the prosthesis for **"Current Thought in Restorative Ceramics."** AO past President, Dr. Russell Nishimura, will be the moderator of this session. Drs. Yu Zhang, Susanne Scherrer and Petra Gierthmühlen will discuss the indications and limitations of ceramic restorations on implants, presenting the advantages and defining the boundaries of their use in everyday clinical practice.

Friday evening, AO President Dr. James Taylor will host the **President's Reception** at the **National Museum of Natural History**, which is complimentary to all registered attendees



Greetings from the Program Chair

and guests. This event promises an exciting and fun-filled evening. Transportation will be provided for this premier social event from each of the hotels.

Saturday morning begins with an original session on the treatment of complete edentulism throughout the life stages. How to address anodontia in a child less than 10 years old? What precautions should I take to restore a 30-year-old patient who is completely edentulous? What are the rules for edentulous patients at age 60 and finally how to approach complete restorations in geriatric patients?

The same indication, but four completely different clinical situations. Each has its own protocols and limits. Drs. Simone Heuberger, Clark Stanford, William Martin and Frauke Müller will present this session moderated by AO past President Dr. Steven Lewis.

After the break, all practitioners, whether they have a more surgical or more prosthetic orientation, will hear Drs. Klaus Gotfredssen, Patrick Palacci and Ghadeer Thalji discuss treatment planning through the latest knowledge

in biomechanics. AO's Immediate Past President, Dr. Michael Norton, will moderate this session.

Lunch with the Masters on Saturday is an institution of the AO. Attendees will have the opportunity to dine and speak with global experts on topics as varied as papillary regeneration techniques to the use of L-PRF in daily practice via digital technology or immediate loading. The number of participants is strictly limited and it is recommended that participants register as soon as possible.

The 2019 Meeting will conclude with an excellent **Closing Symposium** entitled: "Managing Clinical Complexity." While the therapeutic proposals are always more complex and demanding, can we offer treatments that respond to the trilogy: simpler, faster, cheaper? Drs. Marco Degidi, Marc Quirynen, Daniel Spagnoli and German Gallucci will debate this with AO past President Dr. Dayn Boitet as the moderator.

We invite you to mark your calendar and register for the meeting today. We look forward to seeing you in Washington, DC.

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General Information

LOCATION

The meeting will be held at the Walter E. Washington Convention Center in downtown Washington, DC.

REGISTRATION

Register before January 14, 2019, to take advantage of the advance registration discount*. Registration fees for the Annual Meeting include:

- Most scientific sessions (including TEAM and Laboratory Technician programs)
- Admission to the Corporate Forums and Exhibit Hall
- Thursday's Welcome Reception
- Friday's President's Reception
- Continental Breakfasts
- Complimentary Lunches

The Meeting Registration Desk will be located in the West Registration Area of the Walter E. Washington Convention Center beginning at 7:00 am, Wednesday, March 13th.

*Non-Members: Become a member of the AO and take advantage of all of the benefits of membership including a savings on your registration fees. Membership applications must be received at least two weeks before each deadline date to be considered for the discounted "member rate."

TEAM AND LABORATORY TECHNICIAN PROGRAM ATTENDEES

Anyone registering ONLY for the Saturday TEAM or Laboratory Technician programs may pick up their registration materials at the Meeting Registration Desk in the West Registration Area of the Walter E. Washington Convention Center beginning on Saturday, March 16th. The TEAM or Laboratory Technician registration fee includes continental breakfast, lunch and access to the Exhibit Hall on Saturday.

ACTIVE DUTY MILITARY REGISTRATION DISCOUNT

Actively serving military personnel from any country may receive the early registration rate, but are encouraged to pre-register early. After the early registration deadline of February 11, 2019, please contact the AO Registration office at registration@osseo.org or 847-439-1919 for instructions.

Military personnel **must** be in uniform and present a valid military ID in order to register for the early rate on site.

HOUSING INFORMATION

The convention hotels include the Marriott Marquis Washington DC Hotel, Renaissance Washington DC Downtown Hotel, and the Grand Hyatt Washington Hotel. All of these hotels are walking distance to Walter E. Washington Convention Center.

Hotel Rates:

Marriott Marquis Washington DC Hotel

\$325 Single / Double

Renaissance Washington DC Downtown Hotel

\$315 Single / Double

Grand Hyatt Washington Hotel

\$315 Single / Double

Internet: For best availability, make your reservation online at www.osseo.org.

Phone: If making reservation by phone, call the AO official housing provider, onPeak at 855-904-2787. Attendees outside the U.S. call 312-527-7300.

The deadline for hotel reservations is Monday, February 11, 2019.

Hotel reservations/rate availability are not guaranteed after the room block is full or after **February 11, 2019**. Please register early – only a limited number of rooms are available.

A portion of the room rate will subsidize the cost of the meeting space rental.

OFFICIAL TRAVEL AGENCY

To book your airline reservation, call AO's official travel agency, Uniglobe Travel Partners, at 800-235-9386 and after the prompt dial "0" (Monday – Friday 8:30 am – 7:00 pm CST).

Attendees outside the U.S. please call 1-925-838-4445.

TEMPERATURE

The average March temperature in Washington, DC is a high of 56°F to a low of 35°F.

General Information



AIRPORT AND GROUND TRANSPORTATION

There are three airports accessible to the Washington, DC area:

Ronald Reagan Washington National Airport (DCA)

Distance: 4.6 miles from the Walter E. Washington Convention Center.

Estimated taxi fare: \$17 (one way)

Subway/Metro Service \$2 (one way)

Washington Dulles International Airport (IAD)

Distance: 27.8 miles from the Walter E. Washington Convention Center

Estimated taxi fare: \$55 (one way)

Baltimore/Washington International Thurgood Marshall Airport (BWI)

Distance: 34 miles from the Walter E. Washington Convention Center

Estimated taxi fare: \$65 (one way)

TOURS

Please contact the Concierge at the hotel for assistance with arranging local tours.

FOCUS ON EUROPE

The Academy of Osseointegration is pleased to provide our program with a focus on Europe. Many of our speakers are from this region and can be identified throughout the program with the symbol  next to their name.

TRANSLATION SERVICES

Complimentary simultaneous translation in Spanish, French and German will be provided in the two main general session rooms.

SPOUSE/GUEST PROGRAM

The Academy of Osseointegration is pleased to offer spouse and companion programs for your travel group. If you are planning to bring a guest (limit 2), please complete the "Spouse/Guest" portion of the registration form. The fee provides your guest with entry to the following:

- Thursday evening Welcome Reception
- Friday evening President's Reception; and
- Exhibit Hall

ADA CERP, or other educational credit, is not available for a Spouse/Guest registration.

CONTINUING EDUCATION CREDIT INFORMATION

ADA CERP® | Continuing Education Recognition Program

The Academy of Osseointegration is an ADA CERP Recognized Provider. ADA CERP is a service of the American Dental Association to assist dental professionals in identifying quality providers of continuing dental education. ADA CERP does not approve or endorse individual courses or instructors, nor does it imply acceptance of credit hours by boards of dentistry. *Concerns or complaints about a CE provider may be directed to the provider or to the Commission for Continuing Education Provider Recognition at ada.org/cerp.*

This continuing education activity has been planned and implemented in accordance with the standards of the ADA Continuing Education Recognition Program (ADA CERP).

The Academy of Osseointegration designates this activity for 31.5 continuing education credits. Credit is awarded and based on actual number of contact hours, excluding Corporate Forum presentations, breaks, meals and registration periods. Attendees may claim fewer hours in accordance with their actual attendance. *(CE credits are earned by attending all scientific sessions except for the Corporate Forums.)* The current term of acceptance extends from 5/1/2018 – 6/30/2022.

The formal continuing education program for the Academy of Osseointegration is accepted by the Academy of General Dentistry (Recognition #145608) for Fellowship/Mastership credit.

The Academy of Osseointegration is also a recognized continuing education provider for the Dental Board of California (RP 3090).

The Academy of Osseointegration is the sole provider of continuing education and is responsible for the program content and faculty selection. The Academy assures that all continuing education presentations are independent of commercial influences. In addition, the Academy of Osseointegration ensures that the scientific basis for clinical and technical CE content is presented in each course through a peer-review process. Speakers are also required to provide an assessment of the benefits and risks associated with any clinical recommendations or treatment options presented.

AO Certificate in Implant Dentistry

As a service to AO members interested in applying for the AO Certificate in Implant Dentistry, we have categorized each presentation, indicating how that presentation corresponds to the CE Requirements for the Certificate. Each required subject area has been assigned a number.

Listed below are the required CE categories and its corresponding number for the Certificate.

Each presentation will have a number next to it showing how you may apply that presentation towards your AO Certificate CE requirements.

For example:

Surgical Complications/Emergency Medicine 4

This presentation would qualify to meet the hours for the Emergency Medicine category 4.

Categories include:

- | | |
|---|--|
| 1 Anatomy – 4 hours required* | 11 Implant Biomechanics – 8 hours required |
| 2 Local Anesthetic – 1 hour required | 12 Restorative Implant Procedures – 25 hours required* |
| 3 Pharmacology – 2 hours required | 13 Treatment Planning for the Single Tooth: Anterior and Posterior – 30 hours required |
| 4 Emergency Medicine – 4 hours required | 14 Treatment Planning for Multiple Implant Restorations-FDP – 25 hours required |
| 5 Radiographic Interpretation – 4 hours required* | 15 Treatment Planning for the Over Denture Patient – 4 hours required |
| 6 Diagnosis and Treatment Planning – 10 hours required* | 16 Treatment Planning Options for the Fully Edentulous Patient – 30 hours required |
| 7 Risk Assessment – 8 hours required* | 17 Digital and Analog Impressions – 3 hours required |
| 8 Radiographic and Surgical Guide Fabrication – 4 hours required* | 18 Implant Occlusion – 4 hours required |
| 9 Surgical Implant Placement – 30 hours required* | |
| 10 Implant Biomaterials – 4 hours required | |

*Indicates Core Knowledge Categories = 85 hours of CE required.

Please note: Each presentation is only worth the duration of the presentation. For example, if the presentation is 45 minutes long, it would only be worth .75 hours towards the Certificate.

For additional information on the AO Certificate in Implant Dentistry or to apply visit <https://osseo.org/ao-certificate>.



Schedule-at-a-Glance



WEDNESDAY, MARCH 13

7:00 am – 6:00 pm

Registration

8:00 am – noon

**Pre-conference Session: Surgical
Complications/Emergency Medicine**

9:00 am – 4:00 pm

Hands-on Workshops

1:00 – 5:00 pm

**Pre-conference Session:
The Art of Radiographic Imaging and
Interpretation in Implant Dentistry**

THURSDAY, MARCH 14

6:30 am – 6:00 pm

Registration

8:00 – 8:45 am

Corporate Forum 1A

9:00 – 9:45 am

Corporate Forum 1B

10:15 – 11:00 am

Corporate Forum 2A

11:15 am – noon

Corporate Forum 2B

Noon – 1:00 pm

New Member Luncheon

Noon – 1:00 pm

**Complimentary Lunch in the
Exhibit Hall**

Noon – 7:15 pm

Exhibit Hours

12:10 – 1:00 pm

**E-Poster Presentations in the
Exhibit Hall**

1:00 – 5:45 pm

**Welcome Remarks and
Opening Symposium**

5:45 – 7:15 pm

**Welcome Reception and E-Poster
Presentations in the Exhibit Hall**

7:00 – 9:00 pm

**Young Clinicians' Reception
at Cuba Libre**

FRIDAY, MARCH 15

6:30 am – 4:00 pm

Registration

7:00 – 8:00 am

Morning with the Masters

8:00 – 11:40 am

**Oral Clinical Research Abstract
Presentations**

8:00 am – 5:00 pm

Surgical Track

8:00 am – 5:00 pm

Prosthetic Track

9:00 am – 4:00 pm

Exhibit Hours

Noon – 1:30 pm

**Complimentary Lunch and E-Poster
Presentations in the Exhibit Hall**

Noon – 1:30 pm

Young Clinicians' Luncheon

1:30 – 5:10 pm

**Oral Scientific Research Abstract
Presentations**

1:30 – 5:10 pm

Clinical Innovations

7:00 – 9:00 pm

**President's Reception at the
National Museum of Natural History**

SATURDAY, MARCH 16

7:00 am – 3:00 pm

Registration

8:00 – 10:00 am

**Complete Edentulism Through the
Life Stages**

8:00 am – 4:00 pm

Laboratory Technician Program

8:00 am – 4:00 pm

TEAM Program

9:00 am – 1:30 pm

Exhibit Hours

10:30 am – noon

**Current Thought in Implant
Biomechanics**

Noon – 1:30 pm

**Complimentary Lunch in the
Exhibit Hall**

Noon – 1:30 pm

Lunch with the Masters

1:30 – 2:00 pm

Annual Business Meeting

2:00 – 5:00 pm

Closing Symposium

QUESTIONS?

Contact the AO Executive Office

85 W. Algonquin Rd., Suite 550

Arlington Heights, IL 60005

Phone: (800) 656-7736 or

(847) 439-1919

Fax: (847) 427-9656

E-mail: academy@osseo.org

Website: www.osseo.org

Wednesday, March 13

Pre-conference Sessions

One half-day session: Members: \$250 – Non-Members: \$300 – Student Members: \$50 – Student Non-Members: \$100
Both sessions: Members: \$400 – Non-Members: \$500 – Student Members: \$100 – Student Non-Members: \$200
Admission by ticket only • Attendance is limited • Pre-registration is required. On-site registrations will not be permitted.
(Participants must be registered for the Annual Meeting to enroll in the Pre-conference Sessions)

The Academy is offering two educational courses to assist AO members in meeting the CE requirements for the AO Certificate in Implant Dentistry, however registration is open to all Annual Meeting attendees. Attendees may register for one or both sessions.

8:00 am – noon

Surgical Complications/Emergency Medicine 4

Michael Block, DMD

Complications and emergency situations can occur at any time during surgical procedures. This session will teach you how to recognize those situations where immediate intervention may be necessary and how to appropriately respond in these circumstances. We will discuss how to treat bleeding at the time of surgery and how to manage swallowed implant parts.

Upon completion of this presentation, participants should be able to: 1) recognize a cardiac situation requiring intervention; 2) recognize the systemic sequella from diabetes; and 3) recognize the sequella from anti-coagulation and cardiac arrhythmias.



1:00 – 5:00 pm

The Art of Radiographic Imaging and Interpretation in Implant Dentistry 5

Bruno Azevedo, DDS, MS

Advanced Imaging Cone Beam Computed Tomography (CBCT) is one of the hot topics in dental implantology today. This dynamic lecture will guide you through specific steps on how to maximize CBCT scans interpretation acquired for dental implant planning. We will discuss the importance of advance imaging during all phases of treatment including follow up visits in comparison with 2D images. We will address common questions related to radiation dose medico legal issues and imaging acquisition parameters. The lecture will highlight visualization of key anatomical structures such as the anterior maxilla/mandible and the maxillary sinus and we will unveil diagnostic/imaging pearls for current and future 3D imaging users.

Upon completion of this presentation, participants should be able to: 1) explain the importance of CBCT imaging in dental implantology; 2) recognize important imaging findings associated with the maxillary sinus; 3) discuss responsibilities from a medicolegal prospective regarding CBCT imaging; and 4) describe the risk vs. benefit of advanced imaging related to dose.



10:00 – 10:30 am
Refreshment Break

3:00 – 3:30 pm
Refreshment Break



Wednesday, March 13

Hands-on Workshops



9:00 am – 4:00 pm

Members: \$500 – Non-Members: \$600

(Participants must be registered for the Annual Meeting to enroll in the Hands-on Workshops)

Admission by ticket only • Attendance is limited • Pre-registration is required • Refreshment breaks and lunch will be provided.

Each session will provide registrants the opportunity to put their skills to practice using hands-on material. Material will vary for each session and are described below. Sessions are limited and pre-registration is required. **On-site registrations will not be permitted.**

HOW-1

Digital Solutions: Innovations in Single- tooth Replacement

Mark Montana, DDS and
Joseph Schmidt, DDS



In today's world, patients and clinicians want things to be done as quickly and efficiently as possible. For single-tooth replacement, this can be accomplished by utilizing the latest digital tools to help us treatment plan and execute both surgical and prosthetic implant treatment. This course will review how an innovative solution can streamline the implant workflow in single-tooth replacement cases. Additionally, a review and comparison of the conventional implant restorative workflow to one that implements digital technology will be explored. Please join us for this lecture and hands-on course to learn about the flexibility and simplicity of placing implants while utilizing the digital workflow.

Upon completion of this presentation, participants should be able to: 1) describe how implementing digital technology as part of your restorative technique can decrease patient visits and reduce chair-time; 2) explain how to place single-tooth implants safely and predictably; and 3) discuss how the latest digital tools can benefit both surgical and prosthetic implant treatment.

Supported by a grant from
 **Dentsply
Sirona**
Implants

HOW-2

Modern Soft Tissue Management With Applying Autogenous Transplants and Soft Tissue Substitutes

Daniel Thoma, DMD 



Today, implant and reconstructive therapies include a variety of clinical steps to optimize biological and esthetical outcomes. Soft tissue grafting procedures are considered an integral part of implant therapy and various techniques and materials are applied at different time-points. Whereas autogenous transplants are still widely used, they are associated with major disadvantages, most prominently the associated morbidity. Therefore, more recently, a number of soft tissue substitutes have been developed and some of them demonstrate favorable clinical success and less morbidity. This workshop will focus on the clinical decision tree and include step-by-step procedures for the above-mentioned clinical interventions based on recent clinical and scientific evidence.

Upon completion of this presentation, participants should be able to: 1) recognize clinical indications for soft tissue grafting procedures; 2) discuss the role of autogenous tissue; 3) list the advantages and disadvantages of soft tissue substitute; 4) choose the ideal flap design for the use of soft tissue substitute; 5) recognize the ideal dimension of a soft tissue substitute; and 6) perform a clinical procedure for soft tissue volume gain at pontic sites and implant sites.

Supported by a grant from
Geistlich
Biomaterials

Wednesday, March 13

Hands-on Workshops

9:00 am – 4:00 pm

Members: \$500 – Non-Members: \$600

(Participants must be registered for the Annual Meeting to enroll in the Hands-on Workshops)

Admission by ticket only • Attendance is limited • Pre-registration is required • Refreshment breaks and lunch will be provided.

Each session will provide registrants the opportunity to put their skills to practice using hands-on material. Material will vary for each session and are described below. Sessions are limited and pre-registration is required. **On-site registrations will not be permitted.**

HOW-3

The Edentulous Patient – Advanced Surgical Techniques for Both Maxillary and Mandibular Arches 14 16

Jay Neugarten, DDS, MD



Since Professor P.I. Brånemark's serendipitous discovery of osseointegration, treatment protocols and concepts for the totally edentulous patient, both surgically and prosthodontically, have continuously evolved in the pursuit of better treatment for more patients. This full-day program is only for the experienced implant clinician and will cover both surgical and restorative topics and the latest edentulous solutions. The hands-on aspect of this program will be surgically driven and will focus on the placement of implants into models following the protocol of the All-on-4 treatment concept, Zygomatic implants and the new Trefoil solution.

Upon completion of this presentation, participants should be able to: 1) describe management strategies of the edentulous maxilla and mandible; 2) explain the concept of diagnostic and treatment options for advanced rehabilitation of edentulous patients; 3) discuss the principles, advantages and biomechanics of the All-on-4 treatment concept, zygomatic implants and the Trefoil solution; and 4) determine the best implant positioning, design and length for various edentulous cases.

Supported by a grant from



HOW-4

Implant-supported Craniofacial Rehabilitation of the Resorbed or Resected Maxilla 6 13

Gregory Boyes-Varley, BDS, MD and

Dale Howes, BSc.(Dent), BDS, MDent(Pros), FCD(SA), FICD



The rehabilitation of the midface after trauma or oncology resection presents unique surgical and prosthodontic challenges. These structures which are ablated by the trauma or resection supply the functions of speech, mastication and deglutition. In addition, the facial deformities that often result can create serious psychological and aesthetic complications. The anatomic constraints of the craniofacial skeleton are a challenge for finding adequate bone for sustained osseointegration particularly in the ablated maxilla, the resected mandible and the resorbed maxilla following tooth loss.

Regular implant fixtures seldom satisfy both the surgeon and the Prosthodontist for sustained osseous and prosthetic retention of the rehabilitation. A range of specific fixtures have been developed and researched in maxillofacial rehabilitation to overcome the challenges of bony and prosthetic rehabilitation. The research, development, surgical planning and applications of the Oncology implant, the Co-Axis®, the MAX, and extraoral implants developed for maxillofacial rehabilitation will be highlighted and demonstrated on prototyped models of the facial skeleton.

Upon completion of this presentation, participants should be able to: 1) explain the approach to surgical planning, intra-operative decision making, reconstruction implant positioning; 2) incorporate advanced digital technologies and multidisciplinary management in achieving a functional bony base and implant supported craniofacial reconstruction; 3) provide a radiological assessment of the facial bones and how to select implant protocols according to anatomy- diagnostics; and 4) select component and provisional prostheses and discuss prosthodontic implications of implant-supported prosthesis.

Supported by a grant from



Wednesday, March 13

Hands-on Workshops



9:00 am – 4:00 pm

Members: \$500 – Non-Members: \$600

(Participants must be registered for the Annual Meeting to enroll in the Hands-on Workshops)

Admission by ticket only • Attendance is limited • Pre-registration is required • Refreshment breaks and lunch will be provided.

Each session will provide registrants the opportunity to put their skills to practice using hands-on material. Material will vary for each session and are described below. Sessions are limited and pre-registration is required. **On-site registrations will not be permitted.**

HOW-5

WORKSHOP #1:

9:00 am – noon

Guided Surgery Treatment Planning Workflow 5 6 8

Adam Hamilton, BDSc, DCD



In this hands-on workshop, participants will learn how to use treatment-planning software for implant cases, including how to import a dicom file, how to segment and plan the case and how to export files for printing guides.

*Participants are asked to bring a laptop

Upon completion of this presentation, participants should be able to: 1) discuss how to incorporate treatment planning software into their implant practice; 2) import a DICOM file; 3) explain how to segment and plan the case using virtual implant planning software; and 4) describe the indications and clinical use of CBCT and virtual implant planning software.

WORKSHOP #2:

1:00 – 4:00 pm

The Chairside Workflow for Tooth-borne Restorations: Scanning, Designing and Milling a Crown 5 6 8

Marcus Abboud, DMD, PhD and
Rodrigo Fuentealba, DDS



This hands-on workshop is geared towards the busy general dental practice and will focus on the digital chairside workflow. Participants will learn how to use the intraoral scanner to take digital impressions, and then plan and mill the tooth-borne restorations in office. If you want to learn HOW to use the digital equipment in your office, this is the workshop you won't want to miss!

Upon completion of this presentation, participants should be able to: 1) describe the various digital technologies (intraoral scanning, CAD Design and CAM) used for chairside dentistry today; 2) discuss the different clinical workflows are being introduced and taught hands-on; and 3) recognize future trends and technologies are being illuminated in regards to dentistry.

Supported by a grant from



HOW-6

Same-day Guided Immediate Placement and Provisionalization Using an Improved Digital Workflow 8

Gary Morris, DDS,
P.J. Schaner, DMD and
Mark Palmer, President/CEO 360 Imaging



Patients with debilitated or missing dentition often seek rehabilitation to quickly regain masticatory function, aesthetics, and quality of life. Clinicians can now predictably offer treatment solutions for both single-tooth and immediate full-arch restorations to meet patient demands and expectations.

This program combines didactic and hands-on training to show participants a step-by-step, practical approach to deliver provisional prostheses on the day of implant placement with reliable accuracy; definitive prostheses can be fabricated and delivered in an appropriate timeframe.

Upon completion of this presentation, participants should be able to: 1) discuss new ways to manage the treatment planning and communication between the surgeon, referral and lab; 2) describe a comprehensive guided surgery system that is based on the aesthetic tooth position and facilitates the ability to provide a provisional restoration at the time of surgery; 3) list the advancements in the industry that have led to greater efficiencies and improved accuracy through digital workflows; 4) explain the tips and tricks for taking a digital impression with the latest in intraoral scanning technology; and 5) explain what records are needed to start a case and how you will be able to collaborate across multi-specialties to complete the case successfully.



Supported by a grant from



ZIMMER BIOMET
Your progress. Our promise.™

Thursday, March 14

Corporate Forums

8:00 am – noon



Corporate Forum sessions are open to all Annual Meeting attendees at no charge

This collection of sessions offers a unique and significant opportunity to view the latest research and developments in the field of craniofacial implant technology. The Academy is offering 36 industry-hosted presentations featuring the latest implant technology. Registrants may attend any presentation with the option of changing rooms at any time.

The topics and presenters are selected by the participating companies without any input from the Academy of Osseointegration.

Please note: CE Credit is not provided for the Corporate Forum presentations.

Participating companies include:



Noon – 1:00 pm
**Complimentary Lunch
in the Exhibit Hall**

Noon – 7:15 pm
Exhibit Hours

12:10 – 1:00 pm
**E-Poster Presentations
in the Exhibit Hall**

5:45 – 7:15 pm
**Welcome Reception and
E-Poster Presentations
in the Exhibit Hall**

7:00 – 9:00 pm
Young Clinicians' Reception Cuba Libre Restaurant

Thursday, March 14

Opening Symposium



1:00 – 1:30 pm

Welcome and Introductions

James Taylor, DMD, MA, AO President; and
Franck Renouard, DDS, Annual Meeting Program Chair



Dr. James Taylor



Dr. Franck Renouard

1:30 – 5:45 pm

Opening Symposium: Reconsidering the Status Quo

Moderator – Steven Eckert, DDS, MS

KEYNOTE SPEAKER

1:30 – 2:10 pm

What Have We Learned in Orthopedic Osseointegration? 6 13

CAPT Jonathan Forsberg, MD, PhD
Director, U.S. Department of Defense
Osseointegration Program



Upon completion of this presentation, participants should be able to: 1) discuss risks and benefits of bone anchored transdermal implants applied to extremity surgery; 2) describe the limitations of various implants with respect to long-bone physiology and bone density; and 3) recognize the most likely modes of failure for bone anchored transdermal implants.

4:00 – 4:40 pm

2018 IADR Research Award Recipient

Titanium Surface Topography Effects on Osseointegration in Osteoporosis 10

Daniela Mendonca, DDS, MS, PhD



Upon completion of this presentation, participants should be able to: 1) identify the effects of surface topography on different cell population attachment and differentiation; 2) recognize the effect of osteoporosis during early stages of osseointegration on titanium surface nanotopography; and 3) explain how surface topography can improve osseointegration in osteoporosis.

4:40 – 5:10 pm

Can We Abandon Impression Materials and Mechanical Articulators? 17

Dean Morton, BDS, MS



Upon completion of this presentation, participants should be able to: 1) recognize and evaluate options for impression making in implant dentistry; 2) evaluate options for articulation in dentistry and digital options that are becoming increasingly accessible; and 3) evaluate contemporary options for treatment of patients requiring dental implants, inclusive of modern options for impression making and articulation.

2:10 – 2:50 pm

Implant Dentistry: It Was Better Before? 6

Göran Urde, DDS E

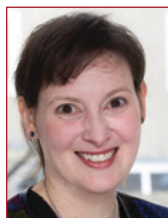


Upon completion of this presentation, participants should be able to: 1) describe the benefits of using different treatment concepts; 2) explain different implant designs; and 3) discuss the disadvantages of different treatment concepts.

2:50 – 3:30 pm

How Valid Is the Literature in Implant Dentistry? 6

Danielle Layton, BDSc (Hons)(Qld),
MDSc(Hons)(Syd), MSc Oxon, DPhil Oxon E



Upon completion of this presentation, participants should be able to: 1) explain how statistics should be used to support hypotheses, rather than to create results or imply causation; 2) describe how results can be manipulated and conclusions then invalidated when data is skewed or loss to follow-up occurs; and 3) recognize that confidence intervals might not give you confidence in the results.

5:10 – 5:45 pm

Human Factors Remain for the Implant Clinician 7

Harold Pinsky, DDS



Upon completion of this presentation, participants should be able to: 1) describe why human factors is a critical component of implant placement; 2) discuss why situational awareness is an end state goal; and 3) explain how professionalism plays a role in implant success.

3:30 – 4:00 pm

Refreshment Break in the Exhibit Hall

Friday, March 15

Morning with the Masters

7:00 – 8:00 am

Members: \$125 – Non-Members: \$150

Admission by ticket only • Attendance is limited

Please register online at www.osseo.org or on the enclosed registration forms on pages 36-37.

All Morning with the Masters presentations run concurrently.

M-1

Use of Soft Tissue Grafting for Improving Peri-implant Health ⑨

Maurício Araújo, DDS, MSc, PhD



The lack of keratinized mucosa represents a challenge for the clinician. It may not only lead to esthetic, but also biological problems. This presentation will explain the fate of the keratinized tissue after tooth extraction, describe the peri-implant soft tissues and discuss the scientific evidence that addresses the effect of the lack of keratinized mucosa on the peri-implant health. Furthermore, clinical cases will be presented to describe the indication and surgical techniques for keratinized tissue augmentation around implants.

Upon completion of this presentation, participants should be able to: 1) describe the peri-implant soft tissues; 2) discuss the benefit of keratinized tissue augmentation; and 3) explain techniques for soft tissue augmentation.

M-2

Writing a Research Paper; What, Why, When and How? (Complimentary) ⑥

Steven Eckert, DDS, MS



Writing a scientific article can be a daunting task. Understanding the process of scientific writing may make this a more comfortable endeavor. This presentation will identify the reasons for writing and the ways in which an author should structure their article. From creating a rational purpose for the article through the various sections, the attendee will become familiar with the process of writing and submitting an article for publication. The review process will be discussed and the attendees will learn the likelihood that their submission would reach publication.

Upon completion of this presentation, participants should be able to: 1) identify the reasons for writing a scientific article; 2) differentiate among various types of articles; and 3) create a structure that matches that of the journal to which an article is submitted.

M-3

Innovations in Bioengineering for Dental Implant Site Development ⑩

William Giannobile, DDS, MS, DMedSc



This presentation will discuss the principles of regenerative medicine including biologic scaffolds, cell therapies, growth factors and the future of 3D printing as well as the challenges with the development of new, more predictable therapies for treating both soft tissue and hard tissue defects around teeth and dental implants.

Upon completion of this presentation, participants should be able to: 1) explain the range of tissue engineering products and applications; 2) discuss the advantages and limitations of tissue engineering in today's clinical practice; and 3) describe what may be available in the near future for both implant dentistry and periodontics.

M-4

Complication Reporting – Overblown or Underdone? ⑦ ⑪ ⑬

Terry Walton, BDS, MDSc, MS, DDSc



Clinicians juggle data about outcomes and complications to help guide treatment decisions, but complication reporting is confusing and often misleading. A single complication type can have significantly different biological, mechanical and fiscal consequences. Mechanical complications are easily identified, but identifying biologic complications is not as straightforward. Diagnostic parameters – bleeding on probing and evaluation of radiographs – are unreliable and misleading and can result in unwarranted therapeutic remedies. This lecture will explore complications, how they can be identified and classified, the limitations of radiographic evaluation, and demonstrate the use of a new fiscal-based classification system allowing comparison of different treatment modalities.

Upon completion of this presentation, participants should be able to: 1) classify complications according to biological and mechanical consequences; 2) identify the diagnostics of radiographic assessment of biological complications; 3) quantify the fiscal burden of complications; and 4) effectively compare the complication burden of different modalities of treatment.

Friday, March 15

Morning with the Masters



7:00 – 8:00 am

Members: \$125 – Non-Members: \$150

Admission by ticket only • Attendance is limited

Please register online at www.osseo.org or on the enclosed registration forms on pages 36-37.

All Morning with the Masters presentations run concurrently.

M-5

Milestones of Maxillofacial Rehabilitation: Implants, Tissue Transfer and Virtual Planning ⑨

Dennis Rohner, MD, DDS 



The use of vascularized free flaps for the reconstruction of extended defects is nowadays the standard procedure for the reconstruction of acquired maxillary and mandibular defects. Correct occlusion, adequate reconstruction of soft tissue, correct positioning of the flap within the defect and immediate functional rehabilitation are important factors that decide the level of success. Meticulous preoperative planning is therefore a must. A combination of 3-D and virtual planning allows us to determine the new occlusion, the extension of the suprastructure, the position of the dental implants, the desired shape of the osseous flap and the amount of necessary soft tissue. In a series of cases, the development, the technical planning, the surgical steps and our results over the last 19 years will be presented.

Upon completion of this presentation, participants should be able to: 1) explain the importance of occlusion-driven preoperative planning; 2) evaluate the combination of 3-D- planning and virtual planning; and 3) illustrate the improvement of quality of life due to functional reconstruction.

M-6

Maxillary Sinus Grafting: Prevention and Management of Complications ⑦

Pascal Valentini, DDS 



Grafting the floor of the maxillary is recognized as a highly successful and predictable method to attain sufficient bone height for posterior maxillary implant placement. While the sinus elevation procedure can be considered by some to be a relatively invasive procedure, reports show a low incidence of surgical and postsurgical complications. The most common complications that can occur in relation with that procedure are either of anatomical or infectious origin. Anatomical particularities, like the sinus shape, a sinus septum or the presence of the alveolar antral artery can lead to operative difficulties, while infectious complications are mainly due to a per-operative contamination or an improper evaluation of the sinus health prior to the surgery. In every situation, a thorough knowledge of sinus anatomy and the use of appropriate surgical methodology and instrumentation will allow the practitioner to avoid most pitfalls associated with that procedure.

Upon completion of this presentation, participants should be able to: 1) identify maxillary sinus diseases; 2) prevent maxillary sinus complications; 3) manage maxillary sinus complications; and 4) describe how to collaborate with the ENT.

Friday, March 15

Morning with the Masters

7:00 – 8:00 am

Members: \$125 – Non-Members: \$150

Admission by ticket only • Attendance is limited

Please register online at www.osseo.org or on the enclosed registration forms on pages 36-37.

All Morning with the Masters presentations run concurrently.

M-7

From the Edentulous State or Terminal Dentition to Functional Rehabilitation: A Health and Function-focused Multidisciplinary Digital Approach 5 6 8

Daniel Spagnoli, DDS, MS, PhD



Oral health and a quality diet effect health in general, especially in the geriatric population or those with systemic disease. The extraction of diseased teeth and eradication of infectious tissue can transform oral health. Effective replacement of the dentition should strive for achieving masticatory efficiency similar to the natural dentition. In this lecture, we will discuss approaches to bone grafting, and full arch restoration of patients indicated for removable or fixed prosthesis. We will describe the technology of coordinated virtual planning including the perspective of radiology, restorative dentistry, laboratory and surgery. We will introduce anatomically-based guided surgery, and guided indexed prosthesis placement. We will discuss prosthetic principles that achieve masticatory efficiency.

Upon completion of this presentation, participants should be able to: 1) discuss how patient examination and records are required for effective treatment planning; 2) plan multidisciplinary coordination of care; 3) list the principles of anatomically guided surgery; and 4) explain the principles of prosthesis that achieve masticatory efficiency.

M-8

Ceramics on Implants: Where Are We Now? 6 8 12

Petra Gierthmühlen, DDS



Several all-ceramic systems were developed over the past few decades to meet the increased demand of patients and dentists for metal-free restoration. However, dentists face challenges with the choice of materials that are nowadays available for implant prosthodontics. This presentation will provide clinical data and the present scientific knowledge on bi-layer as well as monolithic all-ceramic systems.

Upon completion of this presentation, participants should be able to: 1) describe the material properties and how they influence their indications in clinical application; 2) analyze the strength characteristics after fatigue and the clinical longevity of various CAD/CAM and all-ceramic systems; and 3) explain a rationale for material selection.

M-9

Implant Placement and Loading Protocols in Esthetic Implant Rehabilitations 7

German Gallucci, DMD, PhD



Success in implant dentistry should ideally evaluate the long-term primary outcome of an implant-prosthetic complex as a whole. During this lecture, clinical considerations for dental implants will be analyzed in the context of their application to esthetic implant rehabilitations. Risk assessment, treatment planning, placement and loading protocols along with esthetic/prosthetic rehabilitations will be discussed in detail according to different clinical situations. In particular, this presentation will examine the most frequently used criteria to define treatment success for implant rehabilitations in the esthetic zone. Parameters at the implant level, peri-implant soft tissue, prosthetics, and patient satisfaction level will be discussed as indicators of treatment success.

Upon completion of this presentation, participants should be able to: 1) assess associated risk factors for suitable treatment planning; 2) discuss current trends in esthetic implant dentistry; and 3) widen treatment options using a selective approach.

M-10

Current Understanding of the Dynamics of the Bone/Implant Interface 1

J.E. Davies, BDS, PhD, DSc



It has long been established that implant surface topography has a profound effect on peri-implant healing and can, specifically, result in contact osteogenesis. However, our most recent work has illustrated that implant surfaces also change the spatio-temporal pattern of angiogenesis, or blood vessel formation, an essential prerequisite to osteogenesis. This discussion will focus on the mechanisms by which this may occur, and the implications for other bony healing challenges in dentistry.

Upon completion of this presentation, participants should be able to: 1) identify the most important phenomena in early peri-implant endosseous healing; 2) list the basic mechanisms by which implant surface topography orchestrates peri-implant healing; and 3) explain the role of angiogenesis in peri-implant healing.

9:00 am – 4:00 pm
Exhibit Hours

Friday, March 15

Surgical Track – 10 Years After



8:00 am – noon

Moderator – Edward Sevetz, Jr., DMD

8:00 – 8:30 am

10 Years After: Vertical Ridge Augmentation 6 10

Massimo Simion, DDS E

Upon completion of this presentation, participants should be able to: 1) explain the surgical technique for vertical ridge augmentation with GBR; 2) identify the possible risks of GBR techniques related to implant surfaces; and 3) consider possible solutions for today and the future.



10:30 – 11:00 am

10 Years After: Sinus Augmentation 10 15

Pascal Valentini, DDS E

Upon completion of this presentation, participants should be able to: 1) plan to reduce treatment time; 2) explain how to prevent peri-implantitis in the grafted sinus; and 3) discuss how to manage peri-implantitis.



8:30 – 9:00 am

10 Years After: Lateral Ridge Augmentation 6

Daniel Cullum, DDS

Upon completion of this presentation, participants should be able to: 1) identify the role of CBCT and planning/navigation software as indicators of patient-centric care; 2) select and design surgical techniques for horizontal augmentation based on anatomic indicators; and 3) institute surgical treatment options for prevention and management of horizontal deficiencies.



11:00 – 11:30 am

10 Years After: Soft Tissue Augmentation 6

Michael McGuire, DDS

Upon completion of this presentation, participants should be able to: 1) explain the objectives of soft tissue augmentation; 2) compare various techniques and how they differ from the gold standard; and 3) discuss the advantages of biologically-based devices.



9:00 – 9:30 am

10 Years After: Ridge Preservation 10

Maurício Araújo, DDS, MSc, PhD

Upon completion of this presentation, participants should be able to: 1) describe the dimensional alterations that take place in the alveolar process following tooth extraction; 2) recognize the scientific evidence concerning the benefit of socket graft following tooth extraction; and 3) list the ridge preservation procedures.



11:30 am – noon

10 Years After: Augmentation Using Biologics 10 15

Henning Schliephake, DDS, MD, PhD E

Upon completion of this presentation, participants should be able to: 1) identify different biological approaches to augmentation procedures; 2) discuss the different actions of biologics; and 3) explain the limitations and merits of using biologics.



9:30 – 10:00 am

10 Years After: Full Maxillary Reconstruction 7

Friedrich Neukam, MD, DMD, PhD E

Upon completion of this presentation, participants should be able to: 1) identify key parameters for successful rehabilitating the tumor patient; 2) detect preconditions for implant-based functional maxillary rehabilitation; and 3) discuss long-term results after reconstruction of the maxilla in conjunction with implant rehabilitation.



8:00 – 11:40 am

Oral Clinical Research Abstract Presentations

Noon – 1:30 pm

Complimentary Lunch and E-Poster Presentations in the Exhibit Hall

10:00 – 10:30 am

Refreshment Break in the Exhibit Hall

Friday, March 15

Prosthetic Track – 10 Years After



8:00 am – noon

Moderator – Stephen Parel, DDS

8:00 – 8:30 am

10 Years After: Zirconium Prosthesis 12 13

Irena Sailer, DDS, MS



Upon completion of this presentation, participants should be able to: 1) list the long-term outcomes of zirconia-based reconstructions; 2) present results of recent systematic reviews and recommendations for the application of zirconia-based implant reconstructions; and 3) discuss the current knowledge on monolithic zirconia reconstructions.

8:30 – 9:00 am

10 Years After: Screw Retained Prosthesis 12

Konrad Meyenberg, DDS, MD



Upon completion of this presentation, participants should be able to: 1) describe the problems of cement-retained prosthesis; 2) plan an implant case properly for a screw-retained prosthesis; and 3) discuss the optimal construction of a screw-retained prosthesis.

9:00 – 9:30 am

10 Years After: To Splint or Not to Splint Adjacent Implants 6 14

Terry Walton, BDS, MDSc, MS, DDSc



Upon completion of this presentation, participants should be able to: 1) rationalize splinting of adjacent implants in segmental implant-supported prostheses; 2) design prostheses to minimize biological and mechanical complications; and 3) institute clinical and laboratory procedures that minimize prosthesis misfits.

9:30 – 10:00 am

10 Years After: Peri-implant Tissues Improvement 7 10

Carlo Ercoli, DDS



Upon completion of this presentation, participants should be able to: 1) discuss the relevant known anatomical, functional and prosthetic material characteristics affecting peri-implant tissues; 2) describe how soft tissue characteristics and relevant grafting procedures may affect site preparation, before, during and after implant placement; and 3) explain how the ultimate long-term prognosis of our implant prostheses rests on an adequate understanding of the known biologic behaviors of the tissues surrounding our restorations and a humble appreciation of what remains to be elucidated.

10:00 – 10:30 am

Refreshment Break in the Exhibit Hall

10:30 – 11:00 am

10 Years After: Full Maxillary Reconstruction 6 7 12 14

Tomas Linkevičius, DDS, Dip Pros, PhD



Upon completion of this presentation, participants should be able to: 1) identify patient needs; 2) decrease the amount of technical complications; and 3) select the correct number of implants.

11:00 – 11:30 am

10 Years After: Tilted Implants 2

Steven Eckert, DDS, MS



Upon completion of this presentation, participants should be able to: 1) avoid bone grafting as tilting an implant can decrease the global morbidity of the implant treatment; 2) discuss from a biomechanics or biological point of view, that tilted implants don't show more complications or failure rate compared to straight ones; and 3) consider the use of the straight short implants instead of long tilted implants, when possible.

11:30 am – noon

10 Years After: Overdenture 13 15

Steven Sadowsky, DDS



Upon completion of this presentation, participants should be able to: 1) compare the clinical research on fixed and removable prostheses for the edentulous patient; 2) identify the myths that are dictating treatment planning for the edentulous patient; and 3) describe the rubric for selecting an implant removable prosthesis for patients.

8:00 – 11:40 am

Oral Clinical Research Abstract Presentations

Noon – 1:30 pm

Complimentary Lunch and E-Poster
Presentations in the Exhibit Hall

Friday, March 15

Young Clinicians' Luncheon



Admission by ticket only • Attendance is limited

Please register online at www.osseo.org or on the enclosed registration forms on pages 36-37.

Noon – 1:30 pm

Moderator – Jose Antonio Garcia Montemayor, DDS

Noon – 12:45 pm

Immediate Implant Loading With Fixed Full-arch Prosthesis 6 13 16

Riad Almasri, DDS

This lecture is designed to motivate participants to take the first step towards delivering successful full-arch immediate load esthetic prostheses for edentulous patients and those suffering with terminal dentition. The lecture also aims to empower participants with well-designed tools, proven tips and tricks for successful, fast and profitable outcomes creating the optimal treatment patient experience. Topics covered will be how to master case selection criteria, immediate full-arch prosthetic concepts and techniques, how to implement milling capability in-office, and the skills needed for treatment planning to avoid complications related to provisional and definitive esthetic restorations.

Upon completion of this presentation, participants should be able to: 1) describe the concept and technique of immediate implant loading with a fixed full-arch prosthesis; 2) discuss the advantages and disadvantages of immediate loading in this situation; and 3) explain proper case selection and treatment planning in these cases.



12:45 – 1:30 pm

Which is the Best Graft for Bone Augmentation? Is the Use of Growth Factors Effective? An Evidence-based Approach 10 13

Simón Pardiñas López, DDS, MS E

Considerable controversy still exists regarding the choice of the most reliable technique and materials. Decision making in evidence-based implant dentistry involves diagnostic and therapeutic uncertainties, clinicians' heuristics and biases, patients' preferences and values, as well as cost considerations. This evidence-based approach, combined with the clinical experience, assures clinicians that their therapeutic decisions are supported by solid research. The aim of this presentation is to evaluate different grafting materials to help clinicians to make decisions based on the available scientific literature evidence and the patient's clinical characteristics, maximizing their success and minimizing morbidity. This presentation will focus on the different grafting materials available for bone augmentation, including alveolar ridge augmentation, guided bone regeneration, sinus floor augmentation and extraction socket preservation. The benefits and effects of using autologous growth factors will be analyzed showing clinical results, including a protocol using growth factors for treating osteonecrosis due to bisphosphonates.

Upon completion of this presentation, participants should be able to: 1) analyze the available scientific data regarding biomaterials and bone augmentation procedures; 2) make clinical decisions based on the available scientific literature evidence and the patient's clinical characteristics; 3) describe how to obtain and use growth factors in oral surgery procedures; and 4) treat osteonecrosis of the jaw using growth factors.





1:30 – 3:00 pm

Osseointegration: Restoration of Homeostasis or a Foreign Body Response?

Moderator – J.E. Davies, BDS, PhD, DSc

1:30 – 2:00 pm

Innate and Adaptive Immune Response to Titanium Implants 7

Rene Olivares-Naverrete, DDS, PhD

Upon completion of this presentation, participants should be able to: 1) identify the immune system as part of the bone healing mechanism; 2) describe key biomaterial surface properties for osseointegration; and 3) discuss key inflammatory molecules responsible for chronic inflammatory response.



2:00 – 2:30 pm

Molecular Dissection of the Bone-implant Interface 10

Omar Omar, BDS, PhD E

Upon completion of this presentation, participants should be able to: 1) deduce the in-vivo cellular and molecular events of osseointegration, and the influence of implant surface properties on these events; 2) relate the molecular activities of the implant-near cells to structural and ultrastructural development of the bone-implant interface; and 3) underscore the importance of major biological processes, including inflammation and coupled bone remodeling, for the establishment of a functional connection between the implant surface and the recipient bone.



2:30 – 3:00 pm

The Role of Foreign Body Reaction in Peri-implantitis 7

Saso Ivanovski, MDSc(Perio), PhD

Upon completion of this presentation, participants should be able to: 1) list the plausible biological mechanisms for the potential role of the foreign response in progressive peri-implant bone loss; 2) discuss the available evidence for a possible etiological contribution of a foreign body response in peri-implant bone loss; and 3) institute evidence-based approaches to preventing and managing peri-implant bone loss.



3:00 – 3:30 pm

Ice Cream and Refreshment Break in the Exhibit Hall

3:30 – 5:00 pm

Soft Tissue Integration: What is Our Current Understanding?

Moderator – Clarence Lindquist, DDS

3:30 – 4:00 pm

Connective Tissue Graft: Is It Still the Gold Standard Around Implants? 9

Sofia Aroca, MD, DDS, PhD E

Upon completion of this presentation, participants should be able to: 1) identify the importance of a soft tissue seal around oral implants; 2) establish a precise protocol for different clinical situations; and 3) incorporate surgical techniques for soft tissue reconstruction around implants into daily practice.



4:00 – 4:30 pm

Shifting Paradigm for Soft-Tissue Augmentation in the Esthetic Zone 6

Daniel Thoma, DDS E

Upon completion of this presentation, participants should be able to: 1) describe the need for soft tissue grafting procedures; 2) identify limits and disadvantages of autogenous grafts; and 3) select the proper techniques for grafting at implant sites.



4:30 – 5:00 pm

Future Prospects of Peri-implant Regenerative Medicine 7 11

William Giannobile, DDS, MS, DMedSc

Upon completion of this presentation, participants should be able to: 1) identify approaches for rebuilding tissues around dental implants; 2) design regenerative approaches to rebuild edentulous ridges prior to implant placement; and 3) describe basic concepts with biologics, cells, and 3D printing to repair bone defects.



1:30 – 5:10 pm

Clinical Innovations

1:30 – 5:10 pm

Oral Scientific Research Abstract Presentations

7:00 – 9:00 pm

President's Reception at the National Museum of Natural History



1:30 – 3:00 pm

The Evolution of Complex Maxillofacial Rehabilitation

Moderator – Dennis Rohner, MD, DDS

1:30 – 2:00 pm

Advanced Digitally Driven Occlusion-Based Jaw Reconstruction: Improving Functional Outcomes

12 13 17



John Wolfaardt, BDS, MDent (Pros), PhD and
Hadi Seikaly, MA, MD, FRCS(C)

Upon completion of this presentation, participants should be able to: 1) describe conventional surgically intuitive use of bone containing free flaps in jaw reconstructions as well as some of the limitations of these procedures for free flap reconstruction of the jaws; 2) explain how digitally-driven surgical design and simulation may be used to create an occlusion-based digital workflow that provides the fully guided ART procedure for BCFF design that integrates osseointegrated implant installation; 3) discuss how a digital workflow can be used to additive manufacture surgical tools for the occlusion-based approach to BCFF jaw reconstruction; 4) recognize how the occlusion-based digital workflow with the ART procedure may be used to rehabilitate irradiated patients with implants installed in the bone containing free flap as a primary procedure; and 5) explain how the use of SDS in the ART procedure has emerged as viable technology in jaw reconstruction to provide improved outcomes of accuracy, function, cost effectiveness and considerably reduced treatment times.

2:30 – 3:00 pm

Implant Rehabilitation in Craniofacial Cancer and Trauma: The Journey From Resection to Rehabilitation

6 8



Gregory Boyes-Varley, BDS, MD and
Dale Howes, BSc.(Dent); BDS, MDent(Pros), FCD(SA), FICD

Upon completion of this presentation, participants should be able to: 1) define the role of cone beam and CT planning in resection; 2) correct implant placement based on digital technology; and 3) explain the role of microvascular flaps.

3:00 – 3:30 pm

**Ice Cream and Refreshment Break
in the Exhibit Hall**

2:00 – 2:30 pm

3D Tumor Visualization and Virtual Planning of Obturator Prostheses

6



Harry Reintsema, DDS, PhD and
Max Witjes, MD, DDS, PhD

Upon completion of this presentation, participants should be able to: 1) list the design steps in 3D prosthetic design of maxillary defects; 2) provide outlines for the choices to be made for filling up maxillary defects; and 3) discuss surgical considerations for using implant structures for prosthetic support in maxillary defects.



3:30 – 5:00 pm

Current Thought in Restorative Ceramics

Moderator – Russell Nishimura, DDS

3:30 – 4:00 pm

Recent Advancements in Restorative Ceramics 12 13

Yu Zhang, PhD



Upon completion of this presentation, participants should be able to: 1) describe the development, composition, microstructure, properties, and indications of various ceramic restorative materials; 2) explain the rationale behind the choice and usage of restorative ceramic materials to maximize aesthetics and durability; and 3) discuss the state-of-the-art restorative ceramic materials: lithia-based glass-ceramics and translucent zirconias.

4:30 – 5:00 pm

CAD/CAM Ceramics on Implants: What Do We Know? 12 13

Petra Gierthmühlen, DDS E



Upon completion of this presentation, participants should be able to: 1) discuss the scientific evidence pertaining to the clinical success of CAD/CAM materials and digital restorative technologies; 2) recognize the advantages of digital technologies and CAD/CAM monolithic materials compared to core-veneer bi-layer systems such as zirconia based restorations; and 3) explain how predictable and aesthetic clinical outcomes are attributed to digital design.

4:00 – 4:30 pm

Clinical Failure Analysis of Zirconia Implants 11 13

Susanne Scherrer, DDS, PhD, PD E



Upon completion of this presentation, participants should be able to: 1) describe fracture surface analysis; 2) discuss zirconia implants surface textures and microstructures; and 3) correlate bending moments with fracture initiation sites.

1:30 – 5:10 pm

Clinical Innovations

1:30 – 5:10 pm

**Oral Scientific Research
Abstract Presentations**

7:00 – 9:00 pm

**President's Reception at the
National Museum of Natural History**

Friday, March 15

President's Reception



Photo courtesy washington.org



All Annual Meeting registrants are invited to attend the
President's Reception at the
National Museum of Natural History
7:00 – 9:00 pm, Friday

Enjoy complimentary hors d'oeuvres and cocktails with your colleagues from around the world while delving into the fascinating story of our planet, and explore life on Earth through exhibitions and activities, collection objects, and research that happens in the lab and in the field. AO attendees will have the opportunity to walk through Oceans

Hall, Mammals Hall, Winston Gallery, and the National Gem Collection. View permanent exhibits featuring the epic story of how humans have evolved over six million years, a one-of-a-kind interpretive exhibit of the world's oceans, walk through time to explore scientists' findings about America's last dinosaurs, and so much more.

Saturday, March 16

Saturday Morning Session



8:00 – 10:00 am

Complete Edentulism Through the Life Stages

Moderator – Steven Lewis, DMD

8:00 – 8:30 am

Complete Edentulism Before 10 6 13 16

Simone Heuberer, DMD E



Upon completion of this presentation, participants should be able to: 1) identify the limitations of dental implants in children; 2) present treatment concepts of dental implants in children; and 3) institute treatment concepts for complex edentulism in childhood.

8:30 – 9:00 am

Complete Edentulism at 30 6 13 16

Clark Stanford, DDS, PhD



Upon completion of this presentation, participants should be able to: 1) identify specific health issues associated with early-onset edentulism; 2) explain specific management strategies of this condition; and 3) identify how to engage and modify behaviors to maintain old health.

9:00 – 9:30 am

Complete Edentulism at 60 6 13 16

William Martin, DMD, MS



Upon completion of this presentation, participants should be able to: 1) recognize factors of significance in the assessment of treatment outcomes, with particular reference to the completely edentulous patient; 2) describe the clinical factors associated with placing and restoring implants in patients in the 60-year-old age range; 3) compare fixed and removable implant-supported solutions for restoration of the edentulous arch; and 4) discuss maintenance procedures in patients with implant-supported restorations.

9:30 – 10:00 am

Complete Edentulism at 90 6 13 16

Frauke Müller, DMD E



Upon completion of this presentation, participants should be able to: 1) describe the effects of ageing on the orofacial system; 2) design an age-adequate implant-overdenture; and 3) explain the functional decline at an advanced age.

10:30 am – noon

Current Thought in Implant Biomechanics

Moderator – Michael Norton, BDS, FDS, RCS(Ed)

10:30 – 11:00 am

Cantilever and Implant/Teeth Connection 13

Klaus Gotfredssen, DDS, PhD E



Upon completion of this presentation, participants should be able to: 1) decide when to use implant-supported cantilevers; 2) explain when to connect implants and teeth; and 3) discuss the risks involved in using implant-supported cantilevers.

11:00 – 11:30 am

Narrow Implants: A Reliable Solution? 11 13

Patrick Palacci, DDS E



Upon completion of this presentation, participants should be able to: 1) identify and select cases for narrow implants; 2) explain how to safely reduce bone grafting in narrow ridges; and 3) evaluate long-term results.

11:30 am – noon

How Many Implants Do You Need? 6 13 16

Ghadeer Thalji, DDS, PhD



Upon completion of this presentation, participants should be able to: 1) recognize the role of the number of implants used on the esthetic soft-tissue outcomes; 2) discuss the biological and technical complications related to number of implants; and 3) identify the key elements that comprise the treatment planning decisions.

8:00 am – 4:00 pm

Laboratory Technician Program

8:00 am – 4:00 pm

TEAM Program

9:00 am – 1:30 pm

Exhibit Hours

Noon – 1:30 pm

Complimentary Lunch in the Exhibit Hall

10:00 – 10:30 am

Refreshment Break in the Exhibit Hall

Saturday, March 16

Lunch with the Masters



Noon – 1:30 pm

Members: \$150 – Non-Members: \$175

Admission by ticket only • Attendance is limited

Please register online at www.osseo.org or on the enclosed registration forms.

All Lunch with the Masters presentations run concurrently.

LM-1

The One-crown-one-time Concept: The Benefits and Limitations of Digital Technology for Fixed Implant Reconstruction 12 13

Irena Sailer, DDS, MS 



The one-crown-one-time concept encompasses the immediate restoration of osseointegrated implants at the time of the second stage surgery, i.e. the abutment connection surgery. The basic aim is to avoid multiple disconnections of the peri-implant soft tissue attachment during the implant restorative phase, which normally occur at the conventional procedures at healing abutment connection, impression taking and the insertion of final restoration.

In this new concept an optical impression is taken at time of the second stage surgery, and a monolithic restoration is fabricated the same day in-office with aid of a CAD/CAM procedure. The restoration is inserted in the same session and not removed any more. It is hypothesized, that this concept is more efficient than the conventional step-wise approach, and that less bone and soft tissue remodeling and retraction will occur due to the protected integrity of the soft tissue attachment.

Upon completion of this presentation, participants should be able to: 1) discuss the workflow of the one-crown-one-time concept; 2) evaluate biologic effects; and 3) discuss the different material options for the restorations and their effect on the soft tissue health and aesthetics.

LM-2

Benefits of L-PRF in Daily Implant Surgery 9 10

Marc Quirynen, DDS 



Leucocyte- and platelet-rich fibrin (L-PRF), a second-generation platelet concentrate, is an autologous blood derived product, which can be obtained, quickly and at low cost. L-PRF is produced from peripheral blood, which is immediately centrifuged without any anticoagulant. L-PRF is rich in fibrin, platelets ($\pm$ 95% of initial blood) and leucocytes ($\pm$ 50% of initial blood), can be transformed into strong membranes circa 1 mm in thickness.

These membranes release large amounts of growth factors for a long period ($\geq$ 7 days), and as such will promote osseointegration and bone healing. It is an ideal scaffold for sinus augmentation, at least when implants can be inserted at the same moment. These membranes are also used to prepare a L-PRF block (a 1:1 mixture of particulated xenograft with chopped L-PRF membranes, adding Liquid Fibrinogen to trap the xenograft). These L-PRF blocks can be used for horizontal (vertical) bone augmentation, when combined with a collagen membrane, fixed with titanium pins and protected by a superficial layer of L-PRF membranes.

This presentation will show guidelines (step-by-step procedures) for the clinical use of L-PRF membranes and of L-PRF blocks, the clinical outcome, and future perspectives.

Upon completion of this presentation, participants should be able to: 1) explain the preparation of a L-PRF; 2) successfully apply a L-PRF in combination with implant surgery; and 3) describe the advantages of this new strategy.

Saturday, March 16

Lunch with the Masters

Noon – 1:30 pm

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LM-3

Papillae Regeneration: Technique, Limits, Predictability, Long-term Results 9 11

Patrick Palacci, DDS **E**

Implant restorations in the anterior maxilla are challenging, especially when treating patients with a high lip line and a lack of available tissue. These patients will exhibit large and unsightly dark embrasures reminiscent of severe gingival recession. The action of augmenting or regenerating soft tissue is more difficult to perform in the coronal direction than in other directions. Unfortunately, there is usually a need to replace lost tissue in the coronal dimension. Today's dental implantology is not only focused on function but also aesthetics. Papilla reconstruction or preservation is a key factor for a successful aesthetic outcome.

Upon completion of this presentation, participants should be able to: 1) discuss indications for papillae regeneration technique; 2) describe technique tips and tricks; and 3) evaluate long-term results.



LM-4

The Conometric Concept: A New Way to Make Fixed Implant-supported Restorations 12 13

Marco Degidi, MD, DDS **E**

Today the two most common fixed implants are with screws or cement; however, neither of these is without drawbacks. The Conometric Concept makes it possible to fix prostheses onto implants using friction retention; the prosthesis can be removed by the dentist, not the patient. This method can be used for single crowns, bridges or complete arches; temporary or definitive prostheses, and in combination with every type of material. It represents a true paradigm shift.

Upon completion of this presentation, participants should be able to: 1) explain the indications for conometric prostheses; 2) discuss fabrication techniques with single crowns; and 3) describe the analog and the digital approach to conometric prosthesis.



LM-5

Practical Approaches to Peri-implant Tissue Health and Aesthetics 9

Carlo Ercoli, DDS

Soft tissue implant site development techniques are an integral part of comprehensive treatment planning. It is now well established that, while adequate bone volume is critical to successful implant placement, the characteristics of the soft tissues have also a clear influence on the behavior of the underlying bone, influence the peri-implant soft tissue indices and affect the success rate of the overall implant treatment. Soft tissue augmentation therapies are used, not only for site development before implant placement, but can be employed during or after implant placement for simultaneous optimization of the implant site and/or for the treatment of short and long-term complications. The latter are problems that will likely become more common as implant placement is progressively undertaken by a larger number of clinicians. This presentation will focus on the indications, clinical techniques and troubleshooting related to soft tissue augmentation in the context of comprehensive implant therapy.

Upon completion of this presentation, participants should be able to: 1) discuss the indications for soft tissue implant site preparation for health and esthetics; 2) describe the treatment options for soft tissue augmentations for site preparation, before, during and after implant placement; and 3) explain how adequate soft tissue characteristics and their modifications with augmentation procedures, affect short and long-term complications.



Saturday, March 16

Lunch with the Masters



Noon – 1:30 pm

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LM-6

Finding Success with Functional Outcomes in Microvascular Reconstruction of the Jaws: A Digital Fully Guided Occlusion-Based Approach ⑥ ⑨



Hadi Seikaly, MA, MD, FRCS(C) and
John Wolfaardt, BDS, MDent (Pros), PhD

This discussion will focus on digitally driven occlusion-based jaw reconstruction in major head and neck reconstructions. The conventional approach to use of bone containing free flaps (BCFF) required the use of intraoperative intuitive decision making with regard to design of the osseous reconstruction. If osseointegrated implants were to be installed the implant positioning may have also been undertaken with intraoperative intuitive decisions. The consequence of intraoperative intuitive reconstruction design decisions may result in inconsistent or at times suboptimal anatomical and functional outcomes. To overcome the limitations of intraoperative intuitive decision making, the use of digital surgical design and simulation (SDS) has emerged as a viable technology in major jaw reconstruction with the promise of improved function. The process of developing a digital workflow will be considered together with the structuring of a team to undertake digitally driven occlusion-based BCFF reconstruction that incorporates osseointegrated implants. The importance of objective measurement of function will be considered. The required digitally designed

and additive manufactured surgical tools will be discussed. With the digital workflow developed, the use of the ART procedure has emerged for jaw reconstruction in oncology patients. This procedure has become the workhorse for reconstruction of jaws by the Northern Alberta Head and Neck Cancer Team. The ART procedure will be considered as will be the required digitally designed surgical tools and instruments that are additive manufactured. The additional complexities of managing reconstruction and rehabilitation with osseointegrated implants in patients treated with radiation therapy will be considered. The intent of the discussion is to provide participants with insight into the value of a digitally driven occlusion-based approach to reconstruction of the jaws in cancer patients where improved accuracy, cosmetic, and functional outcomes have opportunity of being realized as well as considerably reducing treatment times.

Upon completion of this presentation, participants should be able to: 1) organize the digital workflow and team design required to undertake a digitally driven occlusion-based BCFF reconstruction of the jaw; 2) recognize the clinical and digitally driven workflow of undertaking an ART procedure to reconstruct jaws of head and neck cancer patients; 3) explain the importance of planning for and objectively measuring functional outcomes of patients undergoing BCFF reconstruction of the jaws; and 4) identify the complexities of using the discussed ART approach in managing patients treated with radiation therapy.

1:30 – 2:00 pm

Annual Business Meeting

Saturday, March 16

Closing Symposium



2:00 – 5:00 pm

Managing Clinical Complexity

Moderator – Dayn Boitet, DDS

2:00 – 2:45 pm

The Benefits of L-PRF for Lateral Bone Augmentation 9 10

Marc Quirynen, DDS



Upon completion of this presentation, participants should be able to: 1) explain the preparation of a L-PRF block; 2) successfully apply a L-PRF block; and 3) describe the advantages of this new strategy.

3:30 – 4:15 pm

Bone Augmentation With Biologics 10 13

Daniel Spagnoli, DDS, MS, PhD



Upon completion of this presentation, participants should be able to: 1) discuss inductive pathways of biologics; 2) list the surgical principles that must be adhered to for successful grafting with biologics; and 3) describe grafting of minor and major defects.

2:45 – 3:30 pm

Immediate Loading 11 13

Marco Degidi, MD, DDS



Upon completion of this presentation, participants should be able to: 1) list the inclusion/exclusion criteria for immediate loading; 2) recognize the correct threshold for primary stability; and 3) explain the benefits and drawbacks of immediate-loading approaches.

4:15 – 5:00 pm

Digital Workflow in Esthetic Implant Rehabilitations 8 13 14

German Gallucci, DMD, PhD



Upon completion of this presentation, participants should be able to: 1) describe the use of dental digital technology in implant dentistry; 2) defend the use of dental digital technology in implant dentistry; and 3) evaluate implant-prosthetic protocols in a fully digital workflow.

5:00 pm
Meeting Adjourns

Saturday, March 16

TEAM Program



8:00 am – 4:00 pm

The TEAM Program is for all members of the dental team, including Dentists, Implant Treatment Coordinators, Hygienists and Assistants

Registration for TEAM Program Only: Members: \$125 – Non-Members: \$150

No Charge for Annual Meeting Registrants. Please register online at www.osseo.org or on the enclosed registration forms on pages 36-37.

Moderator – Diane Daubert, RDH, MS, PhD

8:00 – 8:10 am

Welcome and Introductions

8:10 – 9:00 am

Dental Implants: What You Want Your Team to Know ⑥

Russell Johnson, DDS



As dental implants have become a standard of care for tooth replacement, dental professionals are faced with patients seeking implant treatment. The increased demand for dental implants and the access to online information brings the increased need for the dental team to be aware of the details surrounding dental implants. Whether implants are placed in office or only restored, the best light is shed on the practice when any team member can explain the basics of implant design, surgery and the restorative process. This course will provide an overview of dental implants, their indications and contraindications, as well as surgical and restorative overviews that can be readily passed to the patient.

Upon completion of this presentation, participants should be able to: 1) recognize who may be an implant candidate; 2) discuss the surgical process that patients can expect to undergo to have a dental implant placed; and 3) explain the process and expectations of restoring a dental implant.

9:00 – 10:00 am

Risk Assessment When Treatment Planning with Dental Implants ⑦

Donald Curtis, DMD



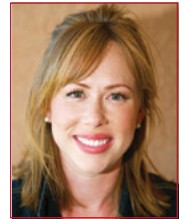
What do you tell a patient that smokes and wants dental implants? Do you say no? Does it matter if they smoke a little or a lot? How do the individual and aggregate risks of patient and clinician factors impact consent, treatment planning and a patient-specific maintenance plan? Much new information has become available about risk assessment and this program will provide clinical examples of how to create value for your patients seeking dental implants.

Upon completion of this presentation, participants should be able to: 1) identify how risk assessment can be helpful in treatment planning, providing informed consent, and providing a patient-specific maintenance plan; 2) identify some of the clinician-based risks that can limit success with dental implants; and 3) discuss why a maintenance plan should be patient specific, risk-based, age-appropriate and account for the type of prosthesis being fabricated.

10:30 – 11:15 am

Three Most Common Implant Maintenance Troubles – Which Do You Want to Overcome? ⑦

Ivy Zellmer RDH, MS



Dental implants are a popular method for tooth replacement, however complications and failures occur. Professional implant maintenance is critical. How clinicians approach implant assessment and provide implant maintenance care becomes a relevant topic. This presentation will discuss a recent UCSF study on national implant care practices, and the surprising results, and discuss methodologies to improve clinical practices so patients receive the best care possible.

Upon completion of this presentation, participants should be able to: 1) discuss key clinical aspects to achieve lifelong implant success; 2) identify critical components of the implant assessment process; and 3) apply the most modern and effective mechanical biofilm therapies for simple and complex implant prosthetic designs.

11:15 am – noon

Tips to Prevent and Treat Peri-implantitis ⑦

Diane Daubert, RDH, MS, PhD



The increased prevalence of peri-implant disease is receiving recent attention showing it is both commonplace and difficult to manage. The course will present the updates on the definition and etiology of peri-implantitis from the American Academy of Periodontology's 2018 consensus and the latest evidence-based information on titanium material properties and peri-implant biofilm. It will provide cases examples to illustrate ways to tip the scale toward peri-implant health.

Upon completion of this presentation, participants should be able to: 1) explain the definition and etiologies of peri-implant disease; 2) discuss recent literature on implant material properties and peri-implantitis; and 3) apply the most recent evidence to implant specific protocols for treatment of peri-implantitis.

Noon – 1:30 pm

Complimentary Lunch in the Exhibit Hall

10:00 – 10:30 am

Refreshment Break in the Exhibit Hall

Saturday, March 16

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Moderator – Diane Daubert, RDH, MS, PhD

1:30 – 2:30 pm

Achieving Whole Mouth Health for Your Patients Through Coaching 7

Matilde Hernandez, DDS, MS

Behavioral modifications and stubborn minds do not change all by themselves. It takes a coach and a leader to help team members identify their strengths and weaknesses. But, it goes beyond helping the team: the team affects change in patient outcomes. If you want to help your patients more and help them improve their treatment outcomes, learn how to improve your team first. Patient outcomes are tied to team performance.

Knowing your patients helps overcoming the challenge of encouraging them to be compliant with oral hygiene instructions. There is good evidence that the adoption of specific psychological interventions based on theories of health-related behavior provides superior outcomes as compared to simple educational interventions.

Upon completion of this presentation, participants should be able to: 1) recognize key character behaviors that affect treatment outcomes; 2) explain how to help others change their minds and their attitudes to have a healthy mouth; 3) engage team members without bribes or fear tactics; and 4) list the characteristics of the contemporary dental patient.



2:30 – 4:00 pm

Interpersonal Communications and Team Building 6

Sandra Phillips, MPA

Some people seem to have a 'magic touch' that enables them to become effective communicators, inspiring their patients, their team members, their friends and family. Actually, there is no magic involved; conversely, the secret weapon is a simple skill set that can be developed by anyone who is motivated! This interactive, energizing approach toward interpersonal communication skill development is aimed at improving teamwork and patient satisfaction. It is designed to provide participants with fresh insights and tangible tools to create win-win outcomes in both straightforward and difficult interpersonal settings.

Upon completion of this presentation, participants should be able to: 1) describe the four basic communication styles presented; 2) identify and adapt your personal style for a deeper mutual understanding with others; and 3) utilize the strengths and diversity of each style to enhance team effectiveness.



8:00 am – 4:00 pm

Laboratory Technician Program

Saturday, March 16

Laboratory Technician Program



8:00 am – 4:00 pm

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Moderator – Robert Faulkner, DDS

8:00 – 8:10 am

Welcome and Introductions

8:10 – 9:00 am

Digitally Designing Implant Restorations 12 17

Tad Thompson, CDT



What the patient “wants” and what they may receive can have differing unexpected results. Technology offers the opportunity for blending the talents of the clinician and technician through digital communication and planning together to achieve esthetic and long lasting restorations.

Upon completion of this presentation, participants should be able to: 1) identify the “wants” of the patient; 2) describe “no plan” failures and lack of communication between clinician and the technician; and 3) explain how a digital plan and a few restorative options can provide the patient with an esthetic and long-lasting implant restoration.

9:00 – 10:00 am

Two Case Studies Utilizing Digital Dentures 17

Vincent Verderosa, CDT, MDT



We will examine a streamlined workflow, for both the dentist and the laboratory for fabrication of digital dentures. We will discuss the steps for scanning and designing a digital denture and compare the workflow between analog and digital dentures and showing case results. We will evaluate two patients where a digital denture was fabricated and share our findings and discuss how to increase profits in your removable department with outsourcing.

Upon completion of this presentation, participants should be able to: 1) describe a streamlined digital denture workflow; 2) increase profits with a removable department; and 3) describe patients results upon insertion of a digital denture.

10:30 am – noon

A Paradigm Shift in Macro Implant Design: Enhancing Restorative and Esthetic Outcomes 12 13

Stephen Chu, DMD, MSD, CDT



Immediate tooth replacement therapy has become a mainstream treatment modality for single tooth implants in the esthetic zone. The advent of subcrestal angle correction [SAC] or co-axis implants has allowed clinicians greater ease of implant placement with an incisal drilling protocol that engages maximum apical-palatal bone yet offering definitive screw-retained restorations. However, the esthetic risks of ITRT include diminished labial bone plate thickness as well as loss of adjacent interdental papilla.

An inventive macro hybrid design concept that combines strategies in implant diameter and shape will be discussed. This novel implant system [inverse body taper design] will address the aforementioned esthetic liabilities and biologic clinical needs of anterior extraction socket implants in combination with SAC. Pre-clinical and clinical prospective research will be presented that scientifically supports, validates, and reinforces the value and application of this novel implant design.

Upon completion of this presentation, participants should be able to: 1) describe the value of peri-implant tissue thickness with platform switched implant designs; 2) explain how angle correction implants can enhance peri-implant soft tissue thickness as well as increase the incidence of screw-retained definitive restorations; and 3) discuss the biologic and esthetic outcomes associated with the ‘body-shift’ implant design concept in shape and diameter.

Noon – 1:30 pm

Complimentary Lunch in the Exhibit Hall

10:00 – 10:30 am

Refreshment Break in the Exhibit Hall



Saturday, March 16

Laboratory Technician Program

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Moderator – Robert Faulkner, DDS

1:30 – 3:00 pm

Advanced Protocol for Immediate Loading of Implants for the Full Arch 8 16

Tony Prestipino, CDT

In this course we will cover in detail how to fabricate an immediate denture. How to convert an immediate denture in the operating room into a temporary fixed hybrid on the full arch in one day. Restorative options after osseointegration.

Upon completion of this presentation, participants should be able to: 1) convert an immediate denture into a fixed temporary hybrid in the same day; 2) explain the role of a dental technician during the surgery on an immediate load procedure; 3) describe to restore a full arch hybrid after osseointegration; and 4) discuss how to compete with the implant supercenters.



3:00 – 4:00 pm

Bridging the Gap Between Dentists and Technicians in a CAD/CAM Workflow

Timothy Hess, DDS 12 13

Dentists and Laboratory Technicians have a symbiotic relationship in their attempt to provide the best care/restorations to patients. Unfortunately, these two groups often function in isolation without a good understanding of which each other is doing on daily basis. This is especially true in today's rapidly changing tech heavy, CAD/CAM environment.

Upon completion of this presentation, participants should be able to: 1) explain the challenging divide between the dentist's clinical procedures and the role of the laboratory technician; 2) discuss the metamorphosis of "traditional" techniques in the CAD/CAM era; and 3) recognize the "gaps" in knowledge and communication between dentists and laboratory technicians based on experience in operative dentistry, fixed prosthetics and the dental laboratory.



8:00 am – 4:00 pm

TEAM Program

Exhibitors



View the latest technological advances in the field of implant dentistry in the Exhibit Hall. Don't miss the latest products and services showcased by more than 100 exhibiting companies on display throughout the meeting. Be sure to visit the exhibits and see the newest products to enhance your practice and improve patient care. Following is a list of exhibitors registered as of October 25, 2018.

- 360imaging
- 3D Diagnostix (3DDX)
- 3Shape
- A. Titan Instruments
- Accurate Manufacturing, Inc.
- ACE Surgical Supply Company
- ACTEON North America
- Alliance Global Technology
- Alpine Pharmaceuticals
- American Board of Oral Implantology
- Anatotemp
- Aseptico
- Benco Dental
- Bien-Air Medical Technologies
- BioHorizons
- BIOLASE
- Birdeye
- Blue Sky Bio
- Brasseler USA
- Brumaba USA
- BTI of North America
- Cagenix, Inc.
- Carestream Dental
- Cell Right Technologies
- ClaroNav
- ClearChoice Dental Implant Centers
- Collagen Matrix
- Convergent Dental
- Cool Jaw By Medico International
- Darby Dental Supply
- Dental Arts Laboratories, Inc.
- Dental Tribune America
- Dentatus USA, Ltd
- Dentium USA
- Dentsply Sirona
- Designs for Vision, Inc.
- Digital Dental Laboratory
- Doctor.com
- DoWell Dental Products, Inc.
- Facial Imaging Mobile Inc
- Fotona
- Garfield Refining Company
- Geistlich Biomaterials
- H & H Company
- Hi Tec Implants/ Dental Implant Technologies
- Hiossen, Inc.
- Hu-Friedy Manufacturing
- Hybridge
- Impladent, Ltd.
- Implant Direct International
- integrated dental systems
- Intra-Lock International, Inc.
- Invibio Biomaterial Solutions
- ITI International Team for Implantology
- J. MORITA USA, INC.
- Karl Schumacher Dental, LLC
- Keystone Dental
- KLS-Martin
- Lighthouse By Web.com
- LumaDent Inc.
- Maxxeus Dental
- Meisinger USA
- MIS Implants Technologies, Inc.
- MoraVision
- Neocis
- Neoss
- Nobel Biocare
- OMSVision
- OraPharma, Inc.
- Osada, Inc.
- Osstell, Inc.
- Osteogenics Biomedical
- Pacira Pharmaceuticals, Inc.
- PBHS, Inc.
- PhotoMed International
- Piezosurgery Incorporated
- Planmeca USA, Inc.
- Power Dental USA, Inc.
- PREAT Corporation
- PreXion, Inc.
- Quintessence Publishing Co, Inc.
- REPLICATE Dental Technologies
- RGP Dental
- Rocky Mountain Tissue Bank
- Salvin Dental Specialties, Inc.
- SigmaGraft
- Snoasis Medical, LLC
- Southern Implants North America
- Straumann
- SurgiTel
- Sweden & Martina, Inc
- TePe Oral Health Care, Inc
- Trovavent, Inc.
- TruAbutment, Inc.
- Ultralight Optics Inc.
- Versah, LLC
- W&H Impex, Inc.
- XEMAX Surgical Products
- X-Nav Technologies, LLC
- Zest Dental Solutions
- Zimmer Biomet Dental

Speaker Index

Marcus Abboud, DMD, PhD
Lexington, KY

Riad Almasri, DDS
Dallas, TX

Maurício Araújo, DDS, MSc, PhD
Rio De Janeiro, Brazil

Sofia Aroca, MD, DDS, PhD 
St. Germain En Laye, France

Bruno Azevedo, DDS, MS
Louisville, KY

Michael Block, DMD
Metairie, LA

Gregory Boyes-Varley, BDS, MD
Johannesburg, South Africa

Steven Chu, DMD, MSD, CDT
New York, NY

Daniel Cullum, DDS
Coeur d'Alene, ID

Donald Curtis, DMD
San Francisco, CA

Diane Daubert, RDH, MS, PhD
Seattle, WA

J.E. Davies, BDS, PhD, DSc
Toronto, Canada

Marco Degidi, MD, DDS 
Bologna, Italy

Steven Eckert, DDS, MS
Byron, MN

Carlo Ercoli, DDS
Rochester, NY

CAPT Jonathan Forsberg, MD, PhD
Bethesda, MD

Rodrigo Fuentealba, DDS
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German Gallucci, DMD, PhD
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William Giannobile, DDS, MS, DMedSc
Ann Arbor, MI

Petra Gierthmühlen, DDS 
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Klaus Gotfredssen, DDS, PhD 
Copenhagen, Denmark

Adam Hamilton, BDS, DCD
Boston, MA

Matilde Hernandez, DDS, MS
Toronto, Ontario, Canada

Timothy Hess, DDS
Auburn, WA

Simone Heuberger, DMD 
Vienna, Austria

Dale Howes, BSc.(Dent), BDS, MDent(Pros), FCD(SA), FICD
Johannesburg; South Africa

Saso Ivanovski, MDSc(Perio), PhD
Brisbane, Queensland, Australia

Russell Johnson, DDS
Seattle, WA

Danielle Layton, BDS (Hons)(Qld), MDSc (Hons)(Syd), MSc Oxon, DPhil Oxon
Brisbane, QLD, Australia

Tomas Linkevičius, DDS, Dip Pros, PhD 
Vilnius, Lithuania

William Martin, DMD, MS
Gainesville, FL

Michael McGuire, DDS
Houston, TX

Daniela Mendonca, DDS, MS, PhD
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Zurich, Switzerland

Mark Montana, DDS
Tempe, AZ

Gary Morris, DDS
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Friedrich Neukam, MD, DMD, PhD 
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Rene Olivares-Navarrete, DDS, PhD
Richmond, VA

Omar Omar, BDS, PhD 
Gothenburg, Sweden

Patrick Palacci, DDS 
Marseille, France

Mark Palmer
Atlanta, GA

Simón Pardiñas López, DDS, MS 
Galicia, Spain

Sandra Phillips, MPA
Seattle, WA

Harold Pinsky, DDS
Ann Arbor, MI

Tony Prestipino, CDT
Alexandria, VA

Marc Quirynen, DDS 
Leuven, Belgium

H. (Harry) Reintsema, DDS, PhD 
Groningen, The Netherlands

Dennis Rohner, DDS 
Aarau, Switzerland

Steven Sadowsky, DDS
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Irena Sailer, DDS, MS 
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Marietta, GA

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Clark Stanford, DDS, PhD
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Tad Thompson, CDT
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Goran Urde, DDS 
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Paris, France

Vincent Verderosa, CDT, MDT
Deer Park, NY

Terry Walton, BDS, MDSc, MS, DDSc
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Max Witjes, MD, DDS, PhD 
Groningen, The Netherlands

Johan Wolfaardt, BDS, MDent(Pros), PhD
Kelowna, BC Canada

Ivy Zellmer, RDH, MS
San Francisco, CA

Yu Zhang, PhD
New York, NY

Hotel Registration Information



Academy of Osseointegration Annual Meeting

March 13 – 16, 2019 • Washington, DC

Marriott Marquis Washington DC Hotel

901 Massachusetts Ave NW
Washington, DC 20001

\$325 Single / Double

Renaissance Washington DC Downtown Hotel

999 9th St NW
Washington, DC 20001

\$315 Single / Double

Grand Hyatt Washington Hotel

1000 H St NW
Washington, DC 20001

\$315 Single / Double

Internet: For best availability, make your reservation online at www.osseo.org.

Phone: If making reservation by phone, call the AO official housing provider, onPeak at 855-904-2787.
Attendees outside the U.S. call 312-527-7300.

Hotel reservations / rate availability are not guaranteed after the room block is full or after February 11, 2019.

DEADLINE FOR HOTEL RESERVATIONS IS MONDAY, FEBRUARY 11, 2019.



Annual Meeting Registration

Academy of Osseointegration Annual Meeting

March 13 – 16, 2019 • Washington, DC

Please type or print your name exactly as you wish it to appear on the badge:

First name	Family name	Degree	NPI # (U.S. Only)	
Office Address	City	State	Zip	Country
E-mail Address	Office Phone No.		Office Fax No.	

I am a(n):

- ☐ AO Member
☐ Non-Member
☐ AO Student Member
☐ Student Non-Member
(letter from Chief of Service required)
☐ Other (please specify) _____

Please indicate primary specialty:

- | | |
|--|---|
| ☐ Oral & Maxillofacial Surgeon | ☐ Endodontics |
| ☐ Periodontist | ☐ Oral & Maxillofacial Pathology |
| ☐ Prosthodontist | ☐ Oral & Maxillofacial Radiology |
| ☐ General Dentist | ☐ Orthodontics |
| ☐ Auxiliary Staff (Dental Technician, Nurse, Office Staff, Scientist, Technical Representative) | ☐ Pediatric Dentistry |
| ☐ Dental Public Health | ☐ Other (please specify) _____ |

☐  Check here if you are disabled and require special services. Please attach a written description of your needs.

Registration Fees (see the Registration Packet for optional programs and lectures)

	Through Jan. 14	Jan. 15 – Feb. 11	After Feb. 11
AO MEMBER			
☐ Doctor (DDS, DMD)	\$499	\$599	\$749
☐ Affiliate/Allied Staff (CDT, MDT, RDH, ROT, Office Staff)	\$215	\$265	\$415
<i>Note: Each registrant must be their own member, not staff of a member.</i>			
☐ Student	\$125	\$150	\$175
NON-MEMBER*			
☐ Doctor (DDS, DMD)	\$1,100	\$1,200	\$1,345
☐ Allied Staff (CDT, MDT, RDH, ROT, Office Staff)	\$295	\$345	\$495
☐ Student (letter from Chief of Service required)	\$350	\$400	\$550
☐ Non-Doctor (CEO, PharmD, PhD, Scientist, Other)	\$290	\$340	\$490
☐ Spouse/Guest (limit two guests per registrant)	\$100 ea.	\$125 ea.	\$150 ea.

Name _____ Name _____

*AO membership applications MUST be received in AO office at least two weeks prior to registration deadlines to be eligible for member discount.

Apply online at www.osseo.org.

ANNUAL MEETING CONFERENCE RECORDING

	Member	Non-Member	Shipping*
☐ Online Access	\$200	\$250	\$0
☐ Flash Drive	\$200	\$250	\$15

*Outside U.S. only

If not attending the Annual Meeting please order online at www.osseo.org.

Total of this page \$ _____

Deadline for Advance Registration: February 11, 2019 • Register online at osseo.org

Annual Meeting Registration

Pre-Conference Sessions (Wednesday, March 13)

Participants must be registered for the Annual Meeting in order to register for the Pre-Conference Sessions

Surgical Complications/Emergency Medicine (8:00 am – noon)

AO Members – \$250 Non-Members – \$300 AO Student Members – \$50 Student Non-Members – \$100 \$ _____

Clinical, Surgical & Medicolegal Aspects of Radiology (1:00 – 5:00 pm)

AO Members – \$250 Non-Members – \$300 AO Student Members – \$50 Student Non-Members – \$100 \$ _____

Both morning and afternoon sessions:

AO Members – \$400; Non-Members – \$500 AO Student Members – \$100 Student Non-Members – \$200 \$ _____

Hands-on Workshops (Wednesday, March 13, 9:00 am – 4:00 pm)

Participants must be registered for the Annual Meeting in order to register for the Hands-on Workshops

AO Members – \$500 Non-Members – \$600

Please rank in order of preference:

____ HOW-01 ____ HOW-02 ____ HOW-03 ____ HOW-04 ____ HOW-05 ____ HOW-06 \$ _____

TEAM Program (Saturday, March 16, 8:00 am – 4:00 pm)

Complimentary to all Annual Meeting Registrants (not including Spouse/Guests)

(Program only – does not include Annual Meeting attendance)

Members – \$125 Non-Members – \$150 \$ _____

I am registering to attend the Annual Meeting and choose to attend this program at no additional charge.

☐ Yes \$0

Laboratory Technician Program (Saturday, March 16, 8:00 am – 4:00 pm)

Complimentary to all Annual Meeting Registrants (not including Spouse/Guests)

(Program only – does not include Annual Meeting attendance)

Members – \$125 Non-Members – \$150 \$ _____

I am registering to attend the Annual Meeting and choose to attend this program at no additional charge.

☐ Yes \$0

Optional Lectures

Morning with the Masters (Friday, March 15, 7:00 – 8:00 am)

AO Members – \$125 Non-Members – \$150 Please rank in order of preference:

1st choice _____ 2nd choice _____ 3rd choice _____ \$ _____

Young Clinicians' Luncheon (Friday, March 15, Noon – 1:30 pm)

☐ Yes \$0

Lunch with the Masters (Saturday, March 16, Noon – 1:30 pm)

AO Members – \$150 Non-Members – \$175 Please rank in order of preference:

1st choice _____ 2nd choice _____ 3rd choice _____ 4th choice _____ 5th choice _____ \$ _____

Deadline for Advance Registration: February 11, 2019

Register online at osseo.org

Total from this page \$ _____

Total from previous page \$ _____

Total Remittance \$ _____

Method of payment: ☐ Check* ☐ Visa ☐ MasterCard ☐ American Express

CC Number

Exp Date

Security Code

Name on card

Signature

*Make checks payable to AO in U.S. funds only.

• Non-U.S. registrations: payable by credit card or U.S. Money Order only.

• All refund requests must be made in writing by February 11, 2019.

• Cancel before February 11, 2019 to qualify for a refund (less \$75 fee).

• No refunds on cancellations after February 11, 2019.

Send completed registration form along with payment to:

Academy of Osseointegration, Attn: Meeting Registration

85 W. Algonquin Rd, Ste. 550

Arlington Heights, IL 60005

Phone: (847) 439-1919 • Fax (847) 427-9656

By registering for this meeting, I hereby acknowledge and agree that AO or its agents may take photographs of me during events and may freely use those photographs in any media for AO's purposes, including but not limited to news and promotional purposes, without further compensation to me.

By registering for this meeting, I hereby acknowledge and authorize (opt-in) to receive future correspondence from the AO and its authorized agents related to the meeting.

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¹ Thoma DS. et al. Clin Oral Implants Res. 2012 Dec; 23(12): 1333–9.

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