

Academy NEWS

A QUARTERLY MEMBER NEWSLETTER

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ACADEMY NEWS

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President's Message

Can it be time to say 'thank you' for the privilege?

By Michael R. Norton, BDS, FDS, RCS(ed)

My dear colleagues, can it really be that I am writing my final President's message? It is beyond comprehension that my year is almost up, yet at the same time I eagerly await the Presidential grand finale that is the AO Annual Meeting, which I need not remind you is in the exhilarating and thrilling city of Los Angeles.

It is usual that in this message the President reflects on the accomplishments of the past year, but I feel compelled to reflect on my entire AO experience. Having joined the Academy in 1992 as a young impressionable clinician, wide eyed at the prospect of rubbing shoulders with the great and the good of implant dentistry, I remember well those early meetings, and the sense that we were all on a steep trajectory as implant dentistry passed from its embryonic epoch into the mainstream.

Even in those early days, I was keen and quick to volunteer, and soon became a European representative on the emerging International Relations Committee, before joining the *Academy News*, when I began to pen my regular feature "News from Across the Pond." Still today, people comment generously about those articles, where I looked to draw parallels and differences between implant dentistry in the U.S. and UK as well as wider Europe. Ultimately, this led to my taking on the role of Editor, something I relished and enjoyed for the 4-year term that I served prior to being asked to join the Board of Directors in 2006.

It's fair to say that as a volunteer, especially one living 4,000 miles from HQ, 11 years of service seems like a very long time, and yet they have been the most rewarding and fulfilling years of my career. I can honestly testify to every young member of the Academy that it is well worth the effort and that you will feel you get as much out of it as you put in. Being a Brit, the idea that I could one day become President of this illustrious Academy seemed a remote pipe dream, yet it is testament to the openness and inclusiveness of the AO that I achieved this. As the saying goes: "If you will it, it is no dream." So I send out this plea to all our young clinicians, please will it and work it, volunteer for your Academy because you might one day be typing this message too!

Over these many years I have witnessed big changes to the Academy, which today stands tall as the world's premier implant organization, representing as it does over 70 countries and running a global program spanning five continents. This is no small achievement when one thinks that only half a dozen years ago we were still running just the one meeting a year in North America. I believe that this is the single biggest strategic goal the Board has achieved during my time. I leave my post confident that our incoming President, Dr. **James T. Taylor**, Ottawa, ON, Canada, and my Board colleagues will continue to work hard to develop and nurture this vision of the AO.

Along with the re-configured Fellowship, the introduction of the Certificate in Implant Dentistry and the ever-constant modernising and evolution of your Academy, I feel that together with former Presidents I leave the AO in a stronger and more outward-looking condition than ever before. Certainly, it is fitting that the final task that I oversee as President is the reformatting of this new look *Academy News*. Indeed, back when I was Editor we established as new the previous format, so I feel that in some way this closes the loop for me and rightly draws to a close my time as a Director and Officer of AO.

It therefore only remains for me to welcome you all to Los Angeles for our 33rd Annual Meeting. I really hope you enjoy the new look and feel to the conference. Together with the AO staff, we have invested considerable effort and time in making this event more contemporary, with greater audience participation, more debate and with many new faces on the podium to help augment the program. I am deeply indebted to **Kevin Smith, Mike Slawny, Gina Seegers, and Kimberly Scroggs**, as well as all the staff at HQ, for all their support and thank all my current and former Board colleagues for their guidance and encouragement over these 11 years. Most of all I thank the whole Academy for the distinct privilege of being able to serve as your first non-American President.

President Dr. Michael Norton (third from right) entertains friends (left to right) Drs. Robert Vogel, Ernest Orphanos, Howard Rosa, Jeff Ganeles, John Lindsay, and Michael Gioia in Boca Raton, FL.



The Academy Awards: Inspiring Imagination – Enhancing Health

By Mehrdad Favagehi, DDS, MS and Lourdes Ann Christopher, DDS, MS

In early March, the Academy of Motion Picture Arts and Sciences will present the 90th Annual Academy Awards, also known as the Oscars, at the Dolby Theatre in Hollywood, California. Around the same time, and less than 10 miles away, the Academy of Osseointegration (AO) will be holding its 33rd Annual Meeting and present its own Academy Awards.

The AO Academy Awards may not be splashed with Versace and Prada, but we have our own share of star power and excellence to celebrate. In the past 30 years or so with modern implants and osseointegration, we've been part of a real-life fairy tale, magically changing people's lives with the gift of osseointegration.

The theme of this year's meeting is *"Inspiring Imagination – Enhancing Health,"* which acknowledges that marvelous things can happen when the power of science is harnessed to realize our imagination. Computer-guided flapless implant surgery, with same day restorations, might have been considered science fiction 30 years ago, generated only in an animated film, but it's now a clinical reality. For many of our patients who have a missing front tooth or their whole dentition restored with implants, there won't be a dramatic story or movie more powerful than the life-changing transformation they experience through the power of osseointegration.

Over the past few years, there have been 24 Oscars awarded at the motion picture Academy Awards, which has prompted event organizers to use the orchestra as a way to cut off acceptance speeches which could otherwise become ridiculously lengthy. AO and its philanthropic arm, the Osseointegration Foundation (OF), annually award much more than three times that number.

Each year, over 50 dental students across the country receive the **"Outstanding Dental Student in Implant Dentistry Award."** The selection process focuses on the student's demonstrated interest and skill level in implant restoration during their senior year. The award includes a certificate, one year membership in AO, including a complimentary subscription to *The International Journal of Oral & Maxillofacial Implants (JOMI)*, AO's scientific journal, as well as a \$500 cash award and complimentary registration to the AO Annual Meeting.

As with the Oscars' recognition of excellence in cinematic achievement, AO recognizes excellence and extraordinary achievements in the dental field. As expected, for an organization that prides itself on its scientific backbone, most of our Academy Awards recognize excellence in research.

Each year, hundreds of scientific, clinical innovation submissions, research proposals, and journal articles are reviewed. Finalists represent the best in worldwide implant research and are selected by the **Research Submissions Committee**, **E-Poster Committee**, the **Clinical Innovations Committee**, the **Osseointegration Foundation**, and the **William R. Laney Committee**. In order to appreciate the depth and breadth of the talent recognized yearly, the following are last year's Academy award (2017) winners:

- **Chris Butterworth**, BDS: Best oral clinical presentation award for his presentation on *"Primary vs. Secondary Zygomatic Implant Placement in Head and Neck Cancer Patients – A 10 Year Prospective."*
- **Manabu Ishijima**, DDS: Best oral scientific presentation award for his presentation on *"Photofunctionalization-grade UV Treatment of Titanium Enhances Adhesion and Retention of Human Oral Epithelial Cells."*
- **Justin Kang**, DMD: First-place poster award for his poster on *"Assessment of Type I Collagen Therapy in Periodontal Regeneration: Acceleration of Tissue Engineering and Dental Implant Osseointegration. Experimental Study in Dogs."*
- **Wendy Wang**, BDS: Second-place poster award for her poster on the *"Management of Large Schneiderian Membrane Perforations with Collagen Membranes – A Historical Report."*
- **Mohamed Mounir**, BDS: Best e-poster case presentation for his presentation on *"Poly Ether-Ether Ketone versus Titanium Subperiosteal Implants: 2 Novel Approaches for Rehabilitation of Severely Atrophic Anterior Maxillary Ridges."*
- **Craig Hofferber**, DDS: Best clinical innovations award for his case report on *"Implant Site Development with a Custom Zirconia Ridge Augmentation Matrix."*

The OF recently announced a new award for the 2018 abstract presenters: **The Osseointegration Foundation Student Travel Grant Program**. According to **Robert Lemke**, DDS, MD, OF Director, and Chair of the Research Submissions Committee, a total of 20 students will receive travel grants of \$1,000 each, awarded to the recipients of the top scoring oral research and e-poster abstracts submitted for the 2018 AO Annual Meeting (see article on page 15). This award is open to both AO student members and student non-members who submit an abstract for the 2018 meeting and are currently enrolled in a dental school program. Additionally, OF awards 10 charitable grants of up to \$10,000 each to subsidize the care of eligible patients.

Each year, OF awards prestigious research grants of up to \$30,000 to dental professionals pursuing groundbreaking dental implant research. Recipients of the **2017-2018 Osseointegration Foundation Research Grants** were awarded their grants in 2017 and will present their results at the 2018 AO Annual Meeting in Los Angeles. **Binnaz Leblebicioglu**, DDS, MS, PhD, of The Ohio State University, won the first place **Applied Science Award** and will present her work titled, *"Identification of Host Related Risk Factors for Peri-implant Tissue Loss."* "I'm very honored to receive the **Applied Science Award**. This grant will allow our team of clinicians and scientists to better understand peri-implant etiopathogenesis specific to dental implants. This knowledge, in turn, will be helpful to develop better preventive tools as well as treatment modalities with more predictable outcomes." says Dr. Leblebicioglu.

The first place **Basic Science Award** winner, **Satheesh Elangovan**, BDS, DSc, DMSc, from the University of Iowa, will present his work on *"A Novel Gene Activated Barrier Membrane that Harnesses the Regenerative Potential of Periosteum."*

The 2016-2017 OF Research Grant recipients presented their findings at the 2017 Annual Meeting and their work may be published by the *JOMI*. They were:

Alireza Moshaverinia, DDS, MS, PhD – UCLA School of Dentistry, recipient of the **2016-2017 OF Basic Science Grant**, who presented on *"An Adhesive and Osteoconductive Hydrogel for Bone Tissue Regeneration in Peri-implant Bone Loss."*

Hom-Lay Wang, DDS, MSD, PhD – University of Michigan School of Dentistry, recipient of the **2016-2017 Applied Science Grant**. Dr. Wang presented his work on the *"Influence of Mucosa Tissue Thickness on Marginal Bone Loss of Implants with Smooth Collars: A Prospective Controlled Trial."*

Every year, AO supports the **International Association for Dental Research (IADR) Award** with up to \$75,000 to help world-class investigators pursue innovation and novel research. This year, the IADR award selection committee presented **Lyndon Cooper**, DDS, PhD with the 2017 IADR Academy of Osseointegration Innovation in Implant Sciences Award. Dr. Cooper's research entitled, *"Epithelial (dys)function in Peri-implantitis,"* will further describe the molecular pathogenesis of the chronic peri-implantitis lesion and will provide characterization of the junctional epithelium in healthy and diseased peri-implant tissues.

The **William R. Laney Award** recipient is selected by an AO committee of the same name to recognize the best article published in the past year in the official publication of AO. The award is named after AO's first president and former editor of *JOMI*. The winner of this respected award in 2017 was **Fouad Khoury**, DMD, PhD, who was honored for his research, *"Mandibular Bone Block Harvesting from the Retromolar Region: A Ten Year Prospective Clinical Study."*

Last year's winner of the Motion Picture Academy's Lifetime Achievement Award was **Donald Sutherland**, who according



Dr. Mehrdad Favagehi



Dr. Lourdes Ann Christopher

to the *Los Angeles Times* had "never received a single Academy Award." The Canadian actor was honored last year in recognition of his entire career. The closest award that AO offers to the lifetime achievement award at the Oscars is the **Nobel Biocare Brånemark Osseointegration Award**. Based on nominations by Titanium Society members, this award includes a medal and a cash award of \$25,000. It recognizes individuals whose impact on, and leadership in, implant dentistry is exemplary in any or all of the OF's mission categories: research, education, and charitable causes. The list of awardees includes the following superstars:

Steven Eckert, DDS, MS (2017), **Ole Jensen**, DMD (2016), **Stephen M. Parel**, DDS (2015), **Prof. Tomas Albrektsson** (2014), **Daniel Buser**, DDS, DMD (2013), **Ulf Lekholm**, DDS (2012), **Daniel VanSteenberge**, MD, PhD (2011), **George A. Zarb**, BChD, DDS, MS (2010), **William R. Laney**, DMD, MS (2009) and **Per-Ingvar Brånemark**, MD, PhD (2008).

Dr. **Kenji W. Higuchi**, an oral and maxillofacial surgeon from Spokane, WA, will be honored as the 11th recipient of this prestigious award, to be presented by OF President Dr. **Edward Sevetz** on March 1, 2018 at the Opening Symposium of AO's 2018 Annual Meeting. Working side-by-side with Professor Per-Ingvar Brånemark, Dr. Higuchi became one of the earliest surgeons in the U.S. to recognize the breakthrough of osseointegration.

At the annual meetings, the Academy recognizes new AO Fellows and AO certificate awardees, in addition to recognizing officers for their service to the Academy. We'd like to recognize **Kevin P. Smith**, AO Executive Director, as "the best director" and his team of dedicated AO staff as "the best actors in a supporting role" because of their dedication and tireless hard work, which makes AO and its annual meeting truly exceptional.

Watching the Academy Awards is the best way to find out what went on in the movie industry over the past year. It's thrilling to see superstars onstage, along with clips from the latest best movies. Similarly, the AO Academy Awards highlight the best in our field. AO awards "inspire our imagination" and allow us to "enhance health" for our patients. Please join us in Los Angeles to watch the AO Academy Awards. Don't miss it – it won't be televised!

Dr. Kenji Higuchi selected as 11th Nobel Biocare Brånemark Osseointegration Award winner

Dr. **Kenji W. Higuchi**, an oral and maxillofacial surgeon from Spokane, WA, is the 11th recipient of the Nobel Biocare Brånemark Osseointegration Award.

This annual award bestowed by the Osseointegration Foundation (OF), AO's philanthropic arm, honors an individual whose impact on implant dentistry is exemplary in any or all of the Foundation's mission categories: research, education, and charitable causes. The award is made possible by a grant from Nobel Biocare.



Dr. Kenji Higuchi

"I am deeply honored. This is especially gratifying because of my close and long-term relationship with the late Professor **Per-Ingvar Brånemark**. It is personally meaningful to be recognized by the Osseointegration Foundation for past involvement in research, education, and humanitarian service, as all these activities have been of central importance throughout my career while providing patient-centered care," says Dr. Higuchi.

OF President Dr. **Edward Sevetz**, board certified oral and maxillofacial surgeon based in Orange Park, FL, will present the award to Dr. Higuchi March 1 at the Opening Symposium of AO's 2018 Annual Meeting.

"Dr. Kenji Higuchi's professional and personal experiences and characteristics qualify him as a role model for anyone in the dental health care field. Almost 40 years ago, he developed a close working relationship with the discoverer of osseointegration, Swedish orthopedic surgeon, Dr. Brånemark."

"Dr. Higuchi worked side-by-side with Professor Brånemark and became one of the earliest surgeons in the U.S. to recognize the breakthrough of osseointegration and how it would vastly improve the quality of the lives of patients," says Dr. Sevetz. "Dr. Higuchi annually took time out of his own private practice to coordinate professional training sessions to 'raise the bar' of those wishing to help patients in their own locales."

Dr. Higuchi is a diplomate of the American Board of Oral and Maxillofacial Surgery. His private practice (Drs. Higuchi and Skinner PS) emphasizes reconstructive oral and maxillofacial surgery. Since 1984, he has been the director of The Spokane Center for Tissue Integrated Reconstruction. Since 2007, Dr. Higuchi and Professor **John Brunski**, Stanford University, have been the principals in OsseoConception LLC.

He completed his undergraduate studies at the University of Wisconsin, his DDS from Marquette University School of Dentistry, and served four years on active duty in the U.S. Army, including an internship at Letterman General Hospital at the Presidio in San Francisco. He obtained his residency with a master's of science in Oral and Maxillofacial Surgery at University Hospitals at the University of Iowa and has held past full-time and adjunct academic appointments at that institution. From 1986-2018, Dr. Higuchi participated in ten separate multi-center prospective clinical trials.

"With his humanitarian heart, science-oriented mind and openly-friendly personality, he is an exemplary role model to all of us on how to lead our professional and personal lives," concludes Dr. Sevetz.

Previous Nobel Biocare Brånemark Osseointegration Award honorees are (in chronological order) **Per-Ingvar Brånemark**, MD, PhD, **William R. Laney**, DMD, MS, **George A. Zarb**, BChD, DDS, MS, **Daniel VanSteenberge**, MD, PhD, **Ulf Lekholm**, DDS, **Daniel Buser**, DDS, DMD, Professor **Tomas Albrektsson**, **Stephen M. Parel**, DDS, **Ole Jensen**, DMD, and **Steven E. Eckert**, DDS.

The selection process involves members of the OF's Titanium Society to propose distinguished candidates.

All Titanium Society members and a guest of their choice are invited to attend the annual Titanium Society breakfast meeting, Saturday, March 3, at 7 a.m., where Dr. Higuchi will give an exclusive presentation for Titanium Society members and their guests.

Positions are still available in the Titanium Society, which is limited to supporters who have pledged \$10,000 total in past and future contributions over a four-year period.

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BRIAN MEALEY DDS, MS
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Risk factors for predictable osseointegration focus of 2018 AO Summit

The Academy of Osseointegration (AO) will be holding a four-day scientific Summit, "Optimizing Patient Care," in the Chicago area in August to bridge how other academies have been addressing the issues of implant healing and force mechanics, inflammation, and mucosal healing.

Chaired by Dr. **Clark M. Stanford**, AO Treasurer and Distinguished Professor and Dean, College of Dentistry, University of Illinois at Chicago, a driving question behind the purpose of the Summit will be to find out if there are new diagnostic and systematic issues that need to be considered with regard to oral implant therapy.

"As more clinical experience is obtained from oral implants having been in patients' mouths longer, either because they were in place for many years or because patients are literally living longer, we are seeing late-term complications that need to be considered," says Dr. Stanford.

According to Dr. Stanford, the Summit will also focus on systematic health and the role of medication on implant healing and outcomes of care.



Dr. Joseph Fiorellini



Dr. Tara Aghaloo



Dr. Clark Stanford



Dr. John Brunski

The Summit will propose four questions, framed around outcomes or impact on long-term osseointegration. Three groups of participants, led by AO Board members, will produce four position papers. Joining Dr. Stanford as Group chairs will be: Drs. **John B. Brunski**, Stanford, CA (Biomaterial/ Bioengineering); AO Director **Joseph P. Fiorellini** (periodontist), Philadelphia, PA; and AO Secretary **Tara L. Aghaloo** (oral and maxillofacial surgeon), Los Angeles, CA.

During the Summit, each of the Group chairs over the course of a half-day segment will arrange a 60-minute plenary presenter, moderate Q&A between the audience and that presenter, provide an overview of the outcomes their group has presented to date, and then three clinical teams will provide primary stability case presentations. A moderated discussion with the entire audience will follow.

"They have already been working very hard on the background programs and assembling plenary speakers for the meeting," Dr. Stanford said of the Group chairs.

Other members of the Planning/Steering Committee include: Drs. **Lyndon F. Cooper** (prosthodontist), Chicago; AO Vice President **Jay P. Malmquist** (oral and maxillofacial surgeon), Portland, OR; and **Homayoun H. Zadeh**, (periodontist), Los Angeles, CA.

Since 1996, AO has organized scientific summits which are designed to assess many of the clinical and evidence-based areas of advancement in implant dentistry. The most recent Summit was "Current Best Evidence for Management of the Edentulous Maxilla" in 2014.



Meet Implant Dentistry's **New Power Couple**

Making their debut at the
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March 1-3, 2018 | Los Angeles Convention Center | Los Angeles, CA





Dr. Jeffrey Ganeles



Dr. Amerian Sones

Dr. Jeffrey Ganeles nominated for AO Board

Nominated for election to the AO Board of Directors at the annual business meeting March 3 in Los Angeles is Dr. **Jeffrey Ganeles**, periodontist, Boca Raton, FL, an Academy member since 1990. Nominated for election as Treasurer is current Director Dr. **Amerian D. Sones**, prosthodontist, Dallas, TX.

Academy News asked Dr. Ganeles to provide a biographical brief as background for the election. Here is how he responded:

Dr. Jeffrey Ganeles

Dr. Jeffrey Ganeles is a periodontist in full time practice in Boca Raton, FL. He is also an Adjunct Associate Professor at Nova Southeastern University, where he has taught and briefly was director of the post-doctoral residency in periodontics. He is a graduate of Cornell University, Ithaca, NY, and received his DMD from Boston University Goldman University College of Dental Medicine in 1983. This was followed by a General Practice Residency at the Hospital of the University of Pennsylvania and Periodontal Residency at the University of Pennsylvania College of Dental Medicine. Dr. Ganeles has authored or co-authored more than 45 articles and chapters in books and journals and is a reviewer for several journals.

Active during his 28 years as an AO member, Dr. Ganeles has served as a member of several Annual Meeting scientific program committees and chaired the Program Committee for the 2017 meeting. In 2006, he served as Co-Chair of the State of the Science in Implant Dentistry (SSID) consensus conference, "Does time to loading affect osseointegration?" In 2005, he was recognized with the "Best Clinical Presentation" award in the Clinical Innovations section. In addition to the AO, he has been an active Fellow of the ITI, a Diplomate of the American Board of Periodontology, and an active member of the American Academy of Periodontology.

In addition to the new director and treasurer, AO members participating in the annual business meeting will elect a new slate of officers headed by Drs. **James C. Taylor**, President, **Jay P. Malmquist**, President-Elect, and **Clark M. Stanford**, Vice President. Continuing on the Board are Drs. **Tara L. Aghaloo** Secretary, **Michael R. Norton**, Immediate Past President, and Directors **Joseph P. Fiorellini**, **Jeffrey D. Lloyd**, **Joerg Neugebauer**, **Robert C. Vogel**, and **Hom-Lay Wang**.

Dr. Israel Ismaj to receive prestigious AO Certificate in Implant Dentistry

Dr. **Israel Ismaj**, an AO member and general practitioner from La Jolla, CA, will receive the AO Certificate in Implant Dentistry during the Academy's 2018 Annual Meeting in Los Angeles.

Dr. Ismaj will receive this prestigious certificate – which represents the highest standards of excellence in implant dentistry, and distinguishes practitioners' continuing education efforts and knowledge to patients and colleagues around the globe – during the March 1 Opening Symposium.

"I was very excited when it was announced that the Academy of Osseointegration was offering this certificate, which recognizes the highest standards of excellence in the field of implant dentistry," says Dr. Ismaj. "Obtaining this certificate was a goal I set for myself. It is humbling recognition from AO for my work and practice in the field of dental implants."

Dr. Ismaj has been practicing General Dentistry since 1972, and was educated in the UCLA dental program. He first underwent implant dentistry training in 1985 at the University of Washington in Seattle, which was conducted by Professor **Per-Ingvar Brånemark**. A year later, in December 1986, Dr. Ismaj was invited by Professor Brånemark to present cases that he had done during that year in his original office in Chula Vista, CA.

"The AO Certificate in Implant Dentistry is a coveted token of professional excellence, which is created to interest the experienced clinician, mid and late career members, as well as the young clinician, and resident members," says Dr. **Amerian D. Sones**, Dallas, TX, Board Liaison for the Fellowship and Certificate in Implant Dentistry Committee. "The certificate is attainable by all. Considering the accolades one will receive from the community, peers, and patients, why wouldn't you apply? Make 2018 your year to submit the requirements for the AO Certificate in Implant Dentistry!"

To meet the certificate's requirements, Dr. Ismaj presented evidence of completing 200 hours of continuing education over a three-year period, including 85 hours of "core knowledge." He also submitted four case presentations covering the following categories: single tooth, fixed partial denture (fixed bridge), full arch fixed reconstruction, and overdenture. Dr. Ismaj has also been an AO member for three consecutive years and attended at least two Annual Meetings during that time.

"AO congratulates long time member, Dr. Israel Ismaj, for his successful completion of certificate requirements and years of service and commitment to the field of implant dentistry," concludes Dr. Sones.

The AO website, www.osseo.org, has complete information about the AO Certificate, including the application along with a Q&A and supporting resources.



Dr. Israel Ismaj





Postural, Strengthening, and Muscle Endurance Training Exercises for Dental Professionals

By Tim Bondy, PT, and Amy Ray PT

Many professions require routine postures, movements and positions during their work day that create excessive muscular and body structural demands. Dentists, dental hygienists, and dental assistants, research shows, are predisposed to unique muscle imbalances that are not problematic to the general population. These imbalances stem from leaning forward at the waist, forward head position, rounded shoulders and elevated arms during the work day.

Oftentimes, well-intended exercise and training regimens performed by dentists create increased pain patterns, due to an emphasis on over strengthening certain muscle groups, while leaving others weakened. Familiarity with these muscle imbalances is necessary in order to develop an appropriate exercise and training program.

Postural correction of faulty body positions and improved awareness of ergonomics during work activities need to be addressed. A balanced trunk-spine-pelvic posture requires a lumbar-pelvic angle that maintains a neutral lumbar lordosis. The trunk and pelvic stabilizer muscle groups need to be contracted to maintain the correct position during patient procedures.

Core and spinal stabilization, along with a muscular endurance training and strengthening program will physically condition clinicians, allowing them to maintain certain postures for sustained periods of time during repetitive procedures.

It is also important to avoid over strengthening the deltoids and supraspinatus muscles, which add to the fatigue of weakened groups in the interscapular region, including the rhomboids. Proper stretching of tight pectorals, trapezii, hip flexors, hamstrings, and cervical and lumbar spine muscle groups is important to include in any exercise regimen.

Before beginning or advancing an exercise program, consulting with a physical therapist with expertise in manual therapy and medical exercise training can be beneficial. It is also recommended that existing pain patterns and trigger points be resolved prior to commencing any regimen.

An exercise routine of low resistance and high repetitions (3-5 sets of 20-30 repetitions), along with restoring and maintaining full range of motion of the cervical spine and shoulder girdles is an appropriate approach.

Starting one's new year with a resolution to commit to a new postural and functional exercise program is a good path for dental professionals to follow.

Address inquiries or requests for guidance on specific exercises or resources to timbondy@timbondypt.com.

Tim Bondy, PT, is a physical therapist, founder and owner of Tim Bondy Physical Therapy, Aquatic and Wellness Centers, with two clinical centers in the Harbor Springs, MI, area. Amy Ray, PT, is a physical therapist who practices at the Bondy centers. The centers' clinical specialties include orthopedic manual therapy, spinal and neurological rehabilitation, hand therapy, and aquatic therapy.

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Clinical Case Example

Clinical images courtesy of German Murias DDS, ABOI/ID

Tooth #15 is set to be extracted



The surgical site was initially debrided to induce bleeding and establish the Regional Acceleratory Phenomenon



Insert Large or Slim sized OsteoGen® Bone Grafting Plugs and allow blood to absorb



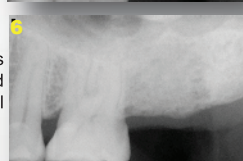
Two Slim OsteoGen® Plugs are in place. Suture over top of socket to contain. No membrane is required



OsteoGen® is a low density bone graft and the OsteoGen® Plugs will show radiolucent on the day of placement



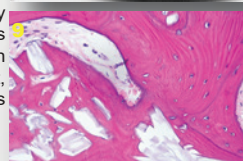
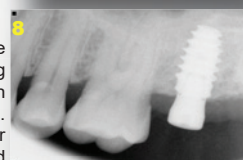
As the OsteoGen® crystals are resorbed and replaced by host bone, the site will become radiopaque.



The collagen promotes keratinized soft tissue coverage while the graft resorbs to form solid bone. In this image, a core sample was retrieved



Implant is placed. Note the histology showing mature osteocytes in lamellar bone formation. Some of the larger OsteoGen® crystals and clusters are slowly resorbing. Bioactivity is demonstrated by the high bone to crystal contact, absent of any fibrous tissue encapsulation



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AO changing with times and technologies

By Kevin P. Smith, MA, MBA, Executive Director

Back in 2007, the AO Board of Directors made a bold decision to replace the 300-page three-ring Board book with a slim and simple CD. I recall some of the board members argued that they would have to bring laptops to the meeting and some remarked that they didn't own a laptop computer, while others voiced their concern that they were unfamiliar with Acrobat reader and wouldn't be able to take notes or write comments on the pages of the various reports. Others insisted that we produce the Board books in both formats for those more comfortable with the bulky three-ring binder version.



We spent a great deal of time discussing change during our October 2017 Board meeting.

Everyone is keenly aware that change is often necessary. One member remarked, "If you don't like change, you will like irrelevance even less,"

quoting General Eric Shinseki, former U.S. Army Chief of Staff. We've all heard the clichés, "Change is the Constant Truth" and I could go on and on citing many similar quotes, but

the Board agreed, "We can inspire greatness, if we can create a great experience." Attendees today require meaningful, inspirational and memorable experiences to feel they are getting value for their investment in time and money, and the Board instituted several changes that will take place in Los Angeles and continue throughout the year.

For example, the 365-year-round mobile app will be launched just prior to the Annual Meeting offering a unique functionality that will transcend the typical functions made available through previous mobile apps by presenting an all-around communication tool exclusively for AO members to use. In addition to the online member database, members will have access to a year-round AO calendar with all Academy-related educational and organizational events, push notifications to alert members of upcoming events, news releases and deadlines, segmented 'hot-issue' announcements and

communication channels for private member groups, a photo gallery, the *Academy News* and *AO CONNECT* newsletters, and all AO social media feeds.

Can't come to Los Angeles to attend the AO Meeting this year? We will bring the meeting to you. AO is one of only a few dental organizations bold enough to offer a hybrid meeting. For the first time, the Opening and Closing Symposia will be offered via live streaming to AO members at a specially-reduced rate. ADA CERP Continuing Education credit will be offered for each of these sessions.

The recently initiated Greater Washington DC AO Study Club has proven to be successful and we've learned how to improve the process even further. A new study club is being considered to be launched in New Orleans and other strategically-placed regions of the United States. Stay tuned for more details.

Reacting to a recent membership poll where our members voiced their opinions to continue publishing *Academy News* in its printed form, the Board agreed to continue publishing the newsletter and, as you can see, it has taken on a new modern and contemporary design with additional, but shorter, articles and the introduction of new graphic elements and more photos. With this new format, we hope members will find the publication to be more enjoyable to read and we anticipate attracting and retaining more advertisers that will help offset the costs of this expanded version.

Early last year the Board decided to bring its Public Relations and Communications activities inhouse and agreed not to renew the contract with its public relations firm. The results of this decision not only saved the Academy a considerable amount of funding, but we have improved our efforts in targeting our social media messages with better results. Members seem to enjoy the brief video segments that resulted in developing over 30 short videos during the past six months, and we have incorporated these into our social media campaign. Facebook "likes" and Twitter followers are both up over 6%, while scientific and clinical content continue to capture the most reach and engagement. WeChat is now added to AO's social media mix and targeted toward the Asian market.

The AO Board of Directors has instituted many changes during this past year. It's evident that we can't do the same thing over and over and expect a different result, and we must embrace change or we will end up like so many companies that have compromised their future: Blackberry, Kodak, Memorex, Blockbuster, Polaroid, and Borders Books to name a few. The AO Board of Directors strives to make the Academy of Oseointegration relevant for you as members, so you can enhance your skills and knowledge and, most of all, provide the best care and integrated treatment modalities for your patients.

Osseointegration Foundation announces first Student Travel Grant recipients

Initiated in 2017 to help provide students with financial assistance to advance both clinical application and basic scientific research in the science of osseointegration, the Osseointegration Foundation (OF) is pleased to announce the recipients of its inaugural Student Travel Grant Program.

The following students who submitted an abstract for the 2018 Annual Meeting and are currently enrolled in a dental school program will each be awarded a \$1,000 grant:

Mansour AlGhamdi

Tufts University
Scientific Poster

Ghada Alrabeah

University College London
Oral Scientific Session

Essa Alwazan

University of Southern California
Clinical Poster

Goncalo Carames

University of Southern California
Scientific Poster

Sara Elhusseini

University of Southern California
Scientific Poster

Maarten Glibert

Ghent University
Oral Clinical Session

Reo Ikumi

Tokyo Medical and Dental University
Scientific Poster

Wataru Kozuma

Tokyo Medical and Dental University
Scientific Poster

Kevin Lim

University of North Carolina
Case Reports/Case Series (Poster)

Mengmeng Lu

Columbia University Medical Center
Oral Scientific Session

Julio Moreno-Alemán Sánchez

University of Southern California
Clinical Poster

Neha Rajput

Tufts University
Scientific Poster

Diana Sedler

University of Southern California
Clinical Poster

Navid Sharif

Loma Linda University
Scientific Poster

Zeeshan Sheikh

University of Toronto
Scientific Poster

Rafael Siqueira

University of Michigan
Oral Scientific Session

Madeline Swenson

University of Iowa
Clinical Poster

Gabriela Vila

University of Florida
Clinical Poster

I Ching Wang

University of Michigan
Oral Clinical Session

Qianqian Yao

Indiana University
Oral Scientific Session

These students were selected for travel grants after receiving the top scores of student-submitted oral research and e-poster abstracts for AO's 2018 Annual Meeting, as reviewed by members of the AO Research Submissions and E-Poster committees.

"AO is the only program in the world that brings together specialists, general dentists, and laboratory technicians to promote all aspects of implant dentistry, and provides the greatest number of travel grants to students. Fostering research at this grassroots level is key to advancing the science of implants for the ultimate benefit of our patients," says Dr.

Robert Lemke, chairman of AO's Research Submissions Committee and board certified oral and maxillofacial surgeon from San Antonio, TX.

All recipients will receive their grants at the AO 2018 Annual Meeting to assist in paying expenses related to attending and presenting their research in Los Angeles.

Dr. Robert Lemke



AO continues steady expansion of global outreach efforts

The AO's global reach and partnership initiatives will continue to expand at a steady pace during 2018, with a schedule that includes meetings of new chapters in France and Columbia.

"Advances in Implant Dentistry" was the program scheduled for the inaugural France Charter Chapter meeting on January 26 in Paris, featuring an impressive schedule of more than a dozen international masters of implant dentistry.

"AO Thinks Global, Colombia Acts Local" was the topic planned for the February 2, 2018 meeting of the new Charter Chapter in Bogota, Columbia. This academic program was slated to feature clinical reports from four implant teams interspersed with an opening address and lecture by AO president Dr. **Michael R. Norton**; presentations by prosthodontist Dr. **Jorge H. Arango**, Chia Cudinamarca, Columbia; and prosthodontist and AO Life Fellow, Dr. **Stephen M. Parel**, Dallas, TX.

As the France and Columbia meetings are scheduled to occur during production of this issue of *Academy News*, full recaps of these meetings will be provided in a later issue.

Other upcoming outreach initiatives and Charter Chapter meetings for 2018 are scheduled to include:

- May 31 – June 2, 2018: South Africa Outreach Meeting, to be held in Johannesburg in conjunction with the South African Association of Osseointegration (details forthcoming).
- July 26, 2018: UK Charter Chapter Meeting in London featuring **Hugo De Bruyn**, DDS, PhD, Prof, University of Ghent, Belgium (details forthcoming).
- July 27, 2018: AO will host a symposium, "Optimizing Care and Managing Complications", in conjunction with the International Association of Dental Research (IADR)/ Pan European Regional Congress in London. It will feature Drs. De Bruyn, **Nick Donos**, London, England; and AO member speaker **Tomas Albrektsson**, Goteborg, Sweden. At this meeting, the 2018 IADR Academy of Osseointegration Innovation in Implant Sciences Award will be presented. This award is provided to one recipient in the form of an unrestricted research grant of up to \$75,000, with funding provided exclusively by AO.

Information about AO's Charter Chapter program can be found on its website at: www.osseo.org/charter-chapters.

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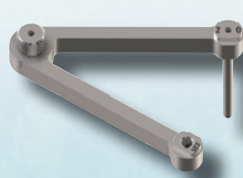
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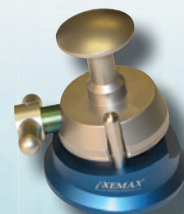
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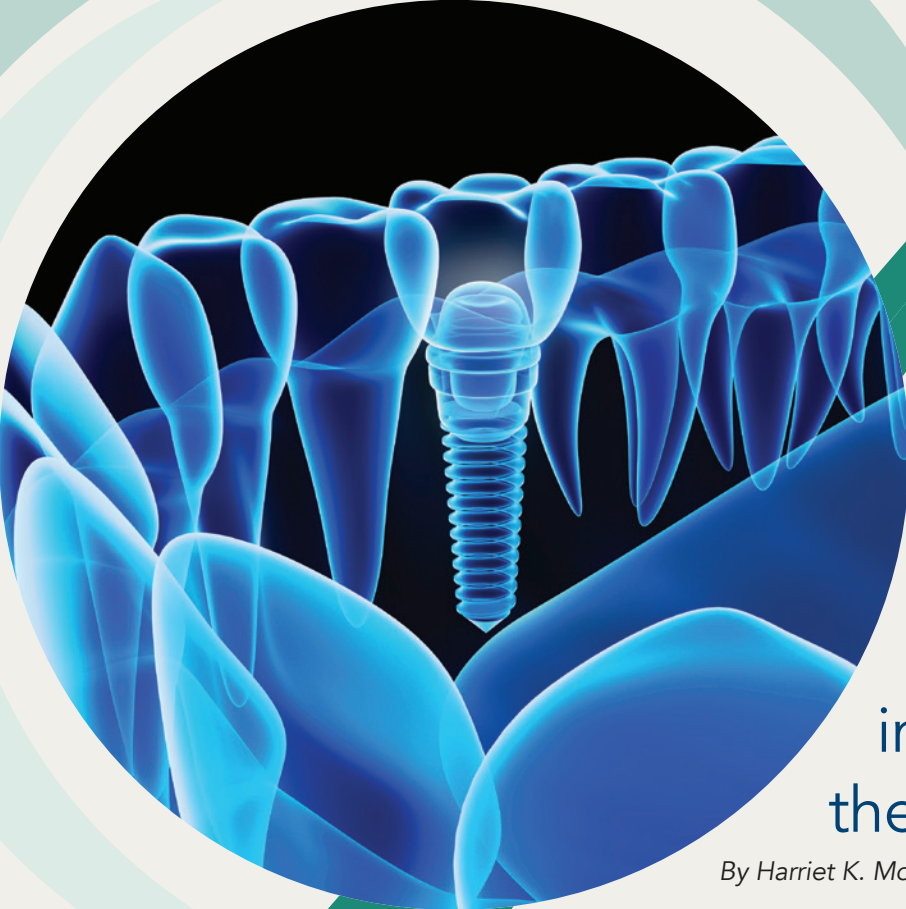
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Intelligent Simplicity



Dr. Harriet McGraw



Be informed about companies offering "compatible" implant parts...and their "warranties"

By Harriet K. McGraw, DDS

A number of companies market abutments they claim to be compatible with every major implant system. In addition to lower pricing, a further inducement to buying is a warranty to refund all monies paid. However, does the warranty also cover costs associated with redoing a case, should it fail?

Patents prevent exact duplication of parts, so, what constitutes compatibility? In a field where tolerances are measured in microns and success depends on precision fit, small variations can contribute to biomechanical complications. What effect do differences in titanium makeup have on results? Warranties bolster product credibility prior to making a purchase, but are they reliable?

I have had an experience dealing with a manufacturer of "compatible" abutments. In October 2010, a 3.3 mm diameter titanium zirconium alloy implant was placed by a periodontist. It integrated successfully and was restored by the patient's general dentist, who went with the dental laboratory's recommendation to use a custom titanium abutment from a company other than the implant manufacturer. In July, 2014, the crown became loose. Both the crown and abutment were replaced. The same company made the replacement abutment.

At the patient's fifth annual implant evaluation appointment in 2015, the periodontist noted significant bone loss and inflammation. At previous annual visits, the implant had been noted to be stable and healthy, with no crestal bone loss. Follow-up surgical intervention in September 2015 revealed a vertical fracture of the implant, which required its removal and grafting of the defect. At that point, the patient became very upset with her general dentist and transferred to my office.

It should be noted that the failed implant was a lower incisor with light contact, in an 85-year-old woman, who generated very low occlusal forces. Since they did not make the abutment, the implant manufacturer's warranty was voided and no compensation provided.

The dentist who had the crown made used the same dental laboratory I work with, so I contacted them for guidance regarding the abutment manufacturer's warranty. They reiterated their assurances that the abutment, crown and all associated surgical and restorative costs would be refunded. A letter documenting the failure was submitted in January 2016. The case had been meticulously documented with radiographs and photographs. Per their request, the extracted abutment/crown/implant unit was sent to the manufacturer. It took months and several phone calls to get any response from the abutment company. After contact was made, requested information was provided to their representative via e-mail.

At the June 2016 International Periodontics & Restorative Symposium in Boston, the periodontist and I went to the abutment manufacturer's booth and spoke to a higher-up in the company. He assured us that he would personally see to it the case would be resolved. It should be mentioned, the company was the first one on the market to offer custom abutments for all implant systems. They had a good deal of credibility, since they were affiliated with, and eventually bought out by, one of the major implant companies; which in turn was bought out by a major dental supply company.

Shortly after the Symposium, the representative from the abutment manufacturer again contacted the periodontist, who was handling the case. More months passed without communication from the company. In fairness, it must be said, the local representative was very responsive and told us he was doing everything he could in his power to expedite the case. Unfortunately, the company was not as responsive. In November 2016, five months after the Symposium, the rep pressed for resolution and was asked to get additional information, which, again, was provided immediately.

On May 18, 2017 the manufacturer issued the general dentist a check for \$718 and the periodontist a check for \$449, nearly a year-and-a-half after they were made aware of the failure. Those amounts covered the initial lab bill and the cost of the implant. They certainly did not include the doctors' time, office staff time, or replacement costs.

The warranty on the abutment manufacturer's website states: "...dental abutments are backed by a comprehensive dental abutment warranty-lifetime (Germany 30 years) for titanium and

gold-shaded abutments...In addition, if an implant supplier does not honor their warranty, due to the use of a [company name] abutment, [implant company name] will replace both the abutment and the implant." To me, a "comprehensive" warranty means making the patient whole again, which is what the manager of the dental laboratory communicated to me at the time the claim was filed.

It should be noted, when the extracted implant, with attached crown and abutment, were sent to the abutment manufacturer, the periodontist requested it be returned. Not only has it not been returned, but inquiries have been met with the response that it cannot be located.

Even though the abutment manufacturer's "comprehensive dental abutment warranty" only covered the lab bill and implant fixture, the periodontist and general dentist(s) did not charge the patient for follow-up treatment. The monetary costs do not come close to the time and emotional cost to the patient and her care providers. It cost the restorative dentist a patient! It also cost the abutment manufacturer customers.

The greatest cost was the loss of a patient's confidence. At a time when practices invest hundreds or thousands of dollars in social media and promotion, the most valuable advertisement is still word-of-mouth. It can also be the most detrimental to a practice.

Risks and dealing with complications are concerns at the forefront of implant dentistry. Included among them are the risks associated with using alternative components. Parts are not always compatible; there is a difference. Is the \$20-\$60 savings per abutment worth the risk of failure and the cost to your reputation?

The Editor's Editorial is intended to contribute to the dialogue on issues important to implant dentists. The views expressed in the editorial do not necessarily reflect the policy of the Academy of Osseointegration or its Board of Directors. Readers who would like to comment or express a point of view on the editorial are invited to write to the editor via email at hkmcgraw@me.com. We will endeavor to publish pertinent comments or views when space permits.



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Other companies left some details out of their full-arch-on-four solution

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