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Osseointegration
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Academy NEWS

A QUARTERLY MEMBER NEWSLETTER

Paving the way for future clinician success

*AO increases global reach with
universities, students (Pages 10-11)*



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ACADEMY NEWS

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President's Message

What's Next, and Farewell!

By James C. Taylor, DMD, MA

Following a brief break for the holidays, AO leadership and staff hit the ground running to move forward with the business of the Academy, a key focus of which, as you might imagine, being our upcoming 34th Annual Meeting in Washington DC, entitled *Current Factors in Clinical Excellence*. You'll recall that the regional focus for this year's meeting is Europe, and we are pleased to present a significant number of Europe's finest speakers, alongside our usual selection of outstanding speakers from every inhabited continent around the world.

My thanks go out once again to my great friend and colleague Dr. **Franck Renouard** (Paris, France), for his outstanding work as my 2019 Program Chair. While most will know Franck for his extensive publication, his global lecturing and his renowned private practice in Paris, many may not be aware of one of his other significant talents: Franck and his spouse Nadine (also a dentist) own and operate a very successful vineyard in the Camargue region of the south of France, producing fine wine under the label of *Scamandre*.

This year's meeting combines popular traditional elements, as well as some new thought-provoking elements, both of which will enable the continuing evolution of the evidence-based practices of our members and guests. As in previous years, Wednesday will bring our ever-popular Pre-conference Sessions and Hands-on Workshops. These sessions are held in smaller groups and learning spaces which provide excellent opportunities for direct collegial interaction with global experts in their respective domains of knowledge. I remind those currently working on their requirements for the *AO Certificate in Implant Dentistry Program* that these sessions are designed to fulfil some of those requirements.

Thursday morning features the Corporate Forums, where industry showcases its latest innovations in materials, equipment and techniques. We at AO are proud that a significant majority of the global implant industry chooses our meeting to launch their new products and concepts each year. We must always be cognizant of the fact that it is our industry partners who continually synthesize and apply research knowledge to creating the devices, materials and technology that the global oral health professional community relies upon to deliver state of the art care around the world.

Thursday afternoon will be our Opening Symposium, entitled *Reconsidering the Status Quo*. The goal of this session is to question some of the fundamentals that we perhaps take for granted in our day to day practice of implant dentistry. Leading off this session as our Keynote Speaker this year, we are very fortunate to have U.S. Navy Captain Dr. **Jonathan Forsberg** from the Walter Reed National Military Medical Center, who is an orthopaedic surgeon and the Director of the U.S. Department of Defense Osseointegration Program.

Our Thursday activities then move to the Exhibit Hall for our traditional Welcome Reception and e-poster presentations. Enjoy hors d'oeuvres, drinks and networking as you view the latest state-of-the-art equipment and techniques from all of our exhibitors, and presentations of the latest research from around the world.

Friday morning brings our Morning with the Masters concurrent sessions, designed to have global experts share their knowledge in a small venue that encourages direct interaction with session participants. This will be followed by the concurrent surgical and prosthetic tracks of the *Ten Years After* sessions, a format created by Dr. Renouard to ask a number of experts to describe what they were doing ten years ago in a certain aspect of implant dentistry, what are they doing now, and what experience and research evidence led to their professional evolution in this regard.

Friday afternoon again offers concurrent surgical and prosthetic sessions. First will be the session entitled *Osseointegration: Restoration of Homeostasis or a Foreign Body Response*; this will elucidate elements of the current understanding of the biology of the implant interface. Concurrently will be the session entitled *The Evolution of Complex Maxillofacial Rehabilitation*, wherein prosthodontist/surgeon teams will share their recent experience in the cutting edge of complex rehabilitative care. Next there will be the session entitled *Soft Tissue Integration: What is our Current Understanding*, where the state of the art in the soft tissue aspect of implant dentistry will be discussed in detail. Finally and concurrently, the session entitled *Current Thought in Restorative Ceramics* will explore the recent science around this key element of restorative implant care.

Friday evening brings the marquis social event of the meeting: the President's Reception at the National Museum of Natural History. All Annual Meeting registrants are invited to attend, and enjoy the fine food, drinks and networking opportunities at this global landmark institution.

Saturday morning features a session entitled *Complete Edentulism through the Life Stages*, exposing the factors and challenges in implant dentistry for patients under 10, at 30, at 60, and at 90 years of age. This will be followed by a session entitled *Current Thought in Implant Biomechanics*, where the parameters of this critical aspect of treatment planning will be explored. Concurrently on Saturday, the full day TEAM and Laboratory Technician programs will update these key cohorts of the implant dentistry care team on current concepts and approaches in their respective aspects of technology, processes, workflow, and patient dynamics.

Continued on page 4



Saturday's popular Lunch with the Masters program will be featured again this year. This event provides participants the opportunity to dine and share direct collegial interaction with global experts on topics of current import, in a small group social environment.

Saturday afternoon brings the Closing Symposium, with this year's theme being *Managing Clinical Complexity*. It involves globally recognized clinician scientists, discussing their evidence-based clinical and technical approaches to issues on the more challenging (and at times controversial) end of the spectrum of modern implant dentistry.

For more details and the entire 2019 program, download our mobile app for all devices (search for AO365).



AO Fellow and President Dr. James Taylor (left) installs AO Fellow Dr. Christian Mertens as AO's Germany Ambassador during the inaugural Germany Charter Chapter meeting.

Concurrently, of course, AO's global agenda has continued to advance. I had the privilege of opening the inaugural German Charter Chapter meeting, and installing AO's Germany Ambassador, AO Fellow Dr. **Christian Mertens** (Heidelberg, Germany). This event was held at the University of Heidelberg on January 23rd, and featured Dr. **Christoph Hämmerle** (Zurich, Switzerland), AO Ambassador Dr.

Mertens, AO Fellow and Board Member Dr. **Jörg Neugebauer** (Landsberg, Germany) and Dr. **Peter Gehrke** (Ludwigshafen, Germany) as speakers.

Next it was down to Athens on January 25th to moderate the AO Session within the 3rd Implant and Oral Surgery Symposium of the Hellenic Association of Oral and Maxillofacial Surgery (HAOMS). Held at the spectacular Athens War Museum, it featured AO member speakers Drs. **Fouad Khoury** (Olsberg, Germany), **Daniele Cardaropoli** (Torino, Italy) and AO Ambassador **Fernando Rojas-Vizcaya** (Castellon, Spain). Also presenting at this meeting was OF Foundation President and AO Fellow Dr. **Georgios Romanos** (Stony Brook, NY). Our thanks go out to HAOMS, and meeting organizer Dr. **Kostas Choupis** (Athens, Greece), for their incredible hospitality and for making AO an integral part of this outstanding regional event.

Following our 2019 Annual Meeting in Washington DC, there are of course further AO events to mark in your calendar. On May 4th, the University of Toronto will partner with AO to host a symposium entitled *A Tribute to the Toronto Conference and its Impact on Global Dentistry*. We are very fortunate to have AO Fellow Dr. **George Zarb** (Toronto, ON, Canada)

introducing the symposium as a key architect of the original Toronto Conference in 1982. AO member speakers for this event will be Drs. **Niloufar Khosravi** (Toronto, ON, Canada), **Lesley David** (Mississauga, ON, Canada), **Carlo Ercoli** (Rochester, NY) and AO Fellow **Izchak Barzilay** (Toronto, ON, Canada).

We shall again be presenting an AO/IADR Symposium, within the 2019 General Session of the International Association of Dental Research in Vancouver, entitled *Developments in Osseointegration*. It will take place on June 20th, and feature AO Fellow and Secretary Dr. **Tara Aghaloo** (Los Angeles, CA), and AO member speakers Drs. **Kathryn Grandfield** (Hamilton, ON, Canada) and **Lyndon Cooper** (Chicago, IL).

Finally, on September 6th, the 7th annual AO/FDI Symposium, entitled *Advances in Clinical Implant Dentistry*, will take place within the 2019 FDI World Dental Congress in San Francisco. Our speakers will be AO President-Elect Dr. **Jay Malmquist** (Portland, OR), and AO member speakers Drs. **Alina Krivitsky** (Los Angeles, CA) and AO Fellow **Lambert Stumpel** (San Francisco, CA).



HAOMS 2019 (left to right): AO member speaker Dr. Daniele Cardaropoli, AO President Dr. James Taylor, AO Ambassador Dr. Fernando Rojas Vizcaya, HAOMS 2019 meeting organizer Dr. Kostas Choupis, OF Foundation President Dr. Georgios Romanos, and AO member speaker Dr. Fouad Khoury.

As the end of our 2019 Annual Meeting marks the end of my term as President, I'll say that it has been a great privilege to serve our Academy in this capacity, and extend my thanks to the AO Staff and Board of Directors for their guidance and support in making possible our significant accomplishments this year. It is with confidence and satisfaction that I shall pass the reins of our Academy to our incoming President Dr. Malmquist, as I know that his leadership and global perspective will keep our Academy on the strong upward trajectory that it currently enjoys. I look forward to continuing to serve our Academy during my upcoming year as Past President, as we collectively continue to shape the present and future of global implant dentistry for the benefit of our patients worldwide. See you soon in Washington DC!



Dr. George Yellich along with his wife, Patricia, and daughter, Audrey, operate the Dentistry4Vets foundation.

A meeting of classmates becomes life changing dental care for veterans

Whether he's running a marathon, skiing down a steep mountain side, crisscrossing a course on waterskis or performing complex surgeries as an oral maxillofacial surgeon, George M. Yellich, DDS, MS (Santa Cruz, CA) approaches each challenge with great passion and enthusiasm. More importantly, he appreciates his many blessings and gives generously of his time and treasure. He gives back to his profession, his alma mater and his community. Dr. Yellich and his wife, Patricia, recently established a foundation to aid veterans called Dentistry4Vets. The story of how it came about is very interesting, as *Academy News* Editor Dr. Harriet McGraw discovered during a recent interview with this husband and wife team.

GEORGE

HKM: George, I understand the idea for a foundation came about, indirectly, from a favor you did for a friend from high school. Please explain a little further.

GMY: A couple of years ago, it was my 50th high school class reunion in Michigan. Coming from California, I was interested in knowing who would be attending. Not seeing the name of one particular friend who had been on the football team with me, Patricia and I drove down the street where he lived and saw him on a ladder, so we stopped and started talking to him. We asked why he would not be at the reunion. Sadly, he had fallen on hard times and was too embarrassed to be seen since he was missing several teeth and the ones he did have were

in poor condition. Wanting to help him, I put the wheels in motion to see what I could do for my friend. **Norman Betts**, DDS, MS (Plymouth, MI) generously allowed me to examine the patient and eventually operate at his oral surgery office. A maxillary and mandibular All-on-Four surgery was done, with prosthodontist **Stephen J. Riedy**, DDS, MS (Plymouth, MI), providing prosthetic treatment. I was able to bring my lab for the conversion and one of my assistants to assist in the case.

HKM: I imagine that was a life changing experience for your friend.

GMY: It was a life changing experience for both of us. Within weeks, my friend was fully engaged in society, dating again, getting out in public, and playing

Continued on page 6

tennis. I see patients who benefit from dental implants on a daily basis. Being able to provide that level of care for a friend in need took on special meaning.

HKM: How did the idea for a foundation grow out of that experience?

GMY: Actually, another event in my life was the impetus for setting up the foundation. A serious operation left me bedridden for several weeks and then unable to walk without crutches for over a year. Having been active in sports all of my life, not being able to even walk was a sobering experience. I was afforded plenty of time to reflect. I thought of others worse off than me, many of whom faced lifelong disabilities. It was then that I realized I wanted to help veterans. Our community in Monterey has over 30,000 veterans. Seeing how my high school friend's life was transformed as a result of the dental surgery and prosthetics provided, it occurred to me that the best way I could help was through my profession. Wanting to insure care would be provided in perpetuity, a foundation was the logical option.

GEORGE AND PATRICIA

HKM: I know your wife, Patricia, fully supports this endeavor. I would think her astute business acumen has been a valuable asset in making your dream a reality.

GMY: Patricia was on board from the beginning. In the depths of a slow recovery from my surgery and the uncertainty of my ability to walk unassisted again, it was Patricia who encouraged me to put my surgical skills to use helping those who were so much less fortunate. She was there when I helped my friend and has continued to work on every endeavor needed to establish this foundation.

HKM: How did you come up with the name and logo?

GMY: It was obvious to me, I could not help veterans with oral surgery and implants alone. They really needed comprehensive dental care. The name and the logo were a family project, including my 15-year-old daughter, Audrey, who was largely responsible for the logo design. I also approached the local dental society board, which was very aware of the problems and unmet dental needs for veterans. They gave a "thumbs up" to my proceeding with the concept. We decided to call the foundation Dentistry4Vets, registered the domain name and developed our logo. We have also been granted 501c-3 (non-profit) organization status.

HKM: Where will patients be seen and how will foundation monies be allocated?

GMY: Our original plan was to have volunteers from the dental society see patients in their respective offices. However, after meeting with the director of the Veteran Transition Center (VTC) in Monterey and our congressman, Jimmy Panetta (D-CA 20th District), our plans changed. The VTC is a rehabilitation center and shelter where local veterans can get help. It is on the old Fort Ord military base in Monterey. Congressman Panetta, a veteran himself and former VTC board member, is working toward having us utilize one of the buildings on the VTC property. Monies from contributions will be utilized to buy equipment, supplies, and to renovate the space. We are also pursuing hiring an executive director to help organize and direct the operation. In this facility, with the help of our dental society, we are hoping to provide all aspects of dental care to the deserving veterans in Monterey, Santa Cruz, and San Benito counties. In the long term, we would like to see the foundation become a nationwide entity, getting professionals from many municipalities involved in helping their local veteran population.

HKM: What advice do you have for your fellow professionals who also want to help individuals in need?

GMY: Every member of the dental profession can provide care. Whether a surgeon provides an implant, a general dentist a restoration, a hygienist a prophylaxis, or a dental assistant oral hygiene instruction, each one can make a difference in the life of someone in need. It is a truly rewarding experience.



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*Hoganson DM, Owens GE, O'Doherty EM, Bowley CM, Goldman SM, Harilal DO, Neville CM, Kronengold RT, Vacanti JP. Preserved extracellular matrix components and retained biological activity in decellularized porcine mesothelium. Biomaterials. 2010, 27: 6934-6940.



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Professor Jan Lindhe selected as 12th Nobel Biocare Brånemark Osseointegration Award winner

Professor Jan T. Lindhe, former chair of the Department of Periodontology at Göteborg University, Göteborg, Sweden, is the 12th recipient of the Nobel Biocare Brånemark Osseointegration Award.

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

"It is with particular pride that I accept this award, as the late Professor **Per-Ingvar Brånemark** was one of my first and most important teachers in biomedical research. I first met Dr. Brånemark in 1965, when I was invited to work with him in his laboratory on issues related to hormonal (estrogen, progesterone) effects on vascular proliferation and permeability during wound healing. We published several papers on this topic, research that subsequently made me qualified for the position of professor and chairman of the Department of Periodontology at the University of Göteborg. In other words, my early collaboration with PI Brånemark was of critical importance for my future professional life," says Professor Lindhe.

OF President Dr. **Georgios E. Romanos**, professor of Periodontology and Diplomate of the American Board of Periodontology at Stony Brook University School of Dental Medicine, Stony Brook, NY, will present the award to Professor Lindhe March 14 at the Opening Symposium of AO's 2019 Annual Meeting in Washington, DC.

"Professor Jan Lindhe is a legend and an authority in the field of dentistry. His critical and innovative studies became milestones in periodontology and implantology. His publications have been cited many times, providing the fundamental explanation in areas such as the pathogenesis of periodontal and peri-implant diseases, the mechanisms of wound healing, the microbiota of the implant-abutment interface, and so many others. There is no doubt that Professor Jan Lindhe deserves this prestigious award, and we are proud to honor him this year for his excellence, innovation and vision in the field of implant dentistry," says Dr. Romanos.

Professor Lindhe received his LDS degree from the Royal School of Dentistry, Malmö, Sweden. He completed graduate training in the Department of Roentgenology, Department of Oral Surgery, and Department of Periodontology at University of Lund, Sweden, where he received OD and PhD degrees in 1964. In 1983, he received his DMD degree from the School of Dental Medicine, University of Pennsylvania, Philadelphia, PA.



Professor Jan Lindhe

Professor Lindhe was professor and chairman, Department of Periodontology, at the University of Umeå, Sweden, before appointment to the same position at Göteborg University. He also served as dean of the School of Dentistry at Göteborg and the School of Dental Medicine at the University of Pennsylvania. He has held editorial positions on many prestigious dental journals and has received honors and recognition in many countries outside his native Sweden, including Denmark, Finland, Greece, Italy, Ireland, Japan, the Netherlands, United Kingdom, and United States. He is an Honorary Citizen of the City of Padova, Italy. He is an Honorary Fellow, International Team of Implantology (ITI), Honorary Member of the American Academy of Periodontology (AAP), and received the William J. Geis Periodontology Award. Professor Lindhe has authored more than 400 original research publications, six textbooks, and many textbook chapters.

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; **Tomas Albrektsson**, MD, PhD; **Stephen M. Parel**, DDS; **Ole Jensen**, DMD; **Steven E. Eckert**, DDS; and **Kenji W. Higuchi**, DDS, MS.

Professor Lindhe will give an exclusive presentation at the annual Titanium Society breakfast meeting, Saturday, March 16, at 7:00 am, where members of the Titanium Society and a guest of their choice are invited to attend.



Progressive Minds Meet Here

Zimmer Biomet Corporate Forum

AO Annual Meeting

March 14, 2019

Walter E. Washington Convention Center

Level 1 Room #146C

Washington DC

8:00 – 8:45 am

**Rehabilitation of Medically Compromised Patients
with Dental Implants**

Cristian Peron, DDS

9:00 – 9:45 am

**Revision Therapy: An Answer to an Increasing Epidemic
Known as Peri-implantitis**

Suheil M. Boutros, DDS, MS

10:15 – 11:00 am

**Single Unit to Full-Arch Implant Restoration Using a
Rapid Recovery Protocol with Two-Week Loading:
A Clinical Perspective**

Jason Kennedy, DMD

11:15 am – noon

**Predictable Bone Regeneration and Function with
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Osseointegration Foundation announces 2019 Student Travel Grant recipients

Twenty-five dental students from around the world will have the opportunity to present their research at the global nexus for implant dentistry – the Academy of Osseointegration’s (AO) 2019 Annual Meeting – as a result of Student Travel Grants awarded by the Osseointegration Foundation (OF).

Initiated in 2017 to help provide students with travel cost reimbursement to present their research at AO’s Annual Meeting, the OF, the philanthropic arm of AO, increased the number of grants awarded to 25 this year with additional support received from Anker Dental Implant Systems.

The winning students were selected for a travel grant after receiving the top scores of student submitted oral research and e-poster abstracts for the Annual Meeting (to be held March 13 – 16, 2019 in Washington, DC) as reviewed by members of the AO Research Submissions and E-Poster committees.

“This is a wonderful year as the Osseointegration Foundation has increased the number of recipients of its Student Travel Grants by 20 percent,” said Dr. **Robert R. Lemke**, chair of the AO Research Submission Committee and member of the AO & OF Research Grant Committee. “While students feel it is a great honor to be selected, it is even a greater honor for the Osseointegration Foundation and one of its sponsors, Anker Dental Implant Systems, to have these students present at AO’s Annual Meeting.”

Of the previous 20 Student Travel Grant recipients (for AO’s 2018 Annual Meeting), three have had their research accepted for publication. Three other students are in the process of writing their papers. In addition, Dr. **Sara El Hussein Ahmed** from Egypt, who is also finalizing her paper for publication, feels AO “is one of the most educational meetings that really addresses hot topics in an academic manner more than any other meeting.”

OF’s Student Travel Grants allow students to come to AO’s Annual Meeting to present their research, which also gives them an opportunity to meet world renowned doctors in implant dentistry. One of last year’s recipients, Dr. **Ghada Alrabeah** from London, England, stated the greatest honor was to meet and have the opportunity to speak with Prof. **Tomas Albrektsson** University of Gothenburg. In addition, Dr. **Wataru Kozuma** from Japan enjoyed the Annual Meeting as an opportunity to talk with people from around the world.

“We are happy that many of these students were able to gain in so many ways by receiving these grants. This is a very positive step in demonstrating the value of the grants by not only increasing attendance of young researchers and clinicians but of their increased role as leaders,” Dr. Lemke concluded.

2019 OF Student Travel Grant Awardees

Guarulhos University, Brazil

Livia Lamunier de Abreu Camargo

Harvard University

Chia-Yu Chen

Indiana University

Yu-Ting Yeh

Malmo University, Sweden

Marco Toia

Ohio State University

Burcu Batak

Texas A&M

Ericka Miller

UCLA

Grant Nishimura

Uninga, Brazil

Edemar Junior Franchetti

Universidad Autonoma de Tamaulipas, Mexico

Jose Maria Araujo Gonzalez

Universidad Nacional Autónoma de México

Héctor Robles

Silvia Kristel Solís Hernández

Universidade de Guarulhos, Brazil

Givelton Coimbra da Luz

University of Illinois at Chicago

Laura Koo Min Chee

University of Kentucky

Firas Al Yafi

University of Michigan

Andrea Ravidà

University of North Carolina

Farahnaz Fahimipour

Lauren Katz

University of Toronto

Niloufar Khosravi

University of Washington

Katherine L Roll

USC

Diana Sedler

Jasveen Wadia

UT Houston

Edmondson Kelsey

Laura Nelson Rabe

Virginia Commonwealth University

Colin McCain

Zhejiang University, China

Dandan Wang

AO University Partnership Program gains global partners

The Academy of Osseointegration's (AO) Global University Partnership Program has expanded by four schools, including two international, non-USA universities in the latest round of activity for this progressing program.

Drs. Jay Laudenbach (left) and Steven Present

The Academy's Global University Partnership Program brings students together with global AO mentors and is a "win-win" endeavor for schools, the Academy, and the global dental implant community by helping students via:

- Educational opportunities to excel in the field of implant dentistry.
- Recognition of senior dental students through the AO Outstanding Student in Implant Dentistry Award.
- Eligibility to earn the AO Certificate in Implant Dentistry.
- Collaboration with AO members and faculty.
- An international platform to network and present clinical research.

After submitting their proposals via AO's new online application process, the latest schools to become AO global university partners are: National Autonomous University of Mexico, NYU School of Dentistry, South Africa University of Witswatersrand, and UCLA School of Dentistry. The application template and sample university programs listed on the website were developed by **Amerian D. Sones**, DMD, MS and **Jeffrey D. Lloyd**, DDS, co-chairs for the AO University Global Programs.

These new partners are in addition to existing programs under the umbrella of AO's Global University Partnership Program, including:

The AO Chapter at Temple University. According to **Steven Present**, DMD, the Kornberg School of Dentistry at Temple University started off the new academic year with a lecture from **Jay Laudenbach**, DMD, an AO member and

periodontist from Philadelphia on immediate loading in the edentulous and partially edentulous arch. More than 100 faculty, residents, and students were in attendance. As of press time, the AO Temple Chapter also had a meeting scheduled for February 6, 2019 featuring **Naren Rajan**, DMD, FAGD, assistant director of digital dentistry at the new Tuoro School of Dental Medicine in New York.

Another continuing successful partnership was the annual "Great Transitions" event held in conjunction with the Dallas County Dental Society (DCDS) at Texas A&M University College of Dentistry, where Dr. Sones, AO treasurer and co-chair of AO's Global University Task Force, is the director of the Office of Continuing Education. At the most recent event held last November and organized by Dr. **Danette McNew** and Dr. Sones, 75 senior dental students were in attendance for an engaging panel discussion and dinner funded by AO. **Brad Crump**, DDS, MS, PA, a local AO member, Dallas periodontist, and past president of the DCDS spoke about the merits of organized dentistry and lifelong dental implant education through the AO.

Working since last August to gauge interest and establish its board of directors, the AO study club at Penn Dental Medicine, headed up by postgraduate periodontal residents Dr. **Thomas H. Yoo** and Dr. **Dennis Sourvanos**, with AO board director **Joseph P. Fiorellini**, DMD, DMSc as one of the faculty advisors, is in the process of finalizing dates for several Spring 2019 events.

AO has committed to sponsor Texas A&M, College of Dentistry's postgraduate residents "Interdisciplinary Implant Seminar," February 18, 2019 where OMS residents will be presenting a multidisciplinary implant treatment planning case. This seminar is attended by residents and faculty of

Dr. Robert Lemke



Nominations for AO board include new director, secretary

Nominated for election to the Academy of Osseointegration (AO) board of directors at the annual business meeting March 16, 2019 in Washington, DC, is **Robert R. Lemke**, DDS, MD, board certified oral and maxillofacial surgeon from San Antonio, TX, and AO member since 2005. Nominated for election as secretary is current director Dr. **Jeffrey D. Lloyd**, general dentist, Rancho Cucamonga, CA.

Academy News asked Dr. Robert Lemke to provide some biographical information as background for the election:

Oral and maxillofacial surgeon Dr. Robert Lemke is in private practice with three offices in the San Antonio area. He holds both DDS and MD degrees from the University of Texas Health Science Center, San Antonio. He is an International Team of Implantology (ITI) Fellow.

Active in AO, he is currently chair of the Research Submissions Committee and was chair of the Charitable Grants Committee. He has also served on the Clinical Innovations, AO/OF Research Grants, Annual Meeting, E-Posters, and Education Oversight/Advisory committees. He also serves on the board of the Osseointegration Foundation.

"I have worked closely with the Osseointegration Foundation board to develop and grow the Student Travel Grant awards program. This is a wonderful direction that the Board has taken to foster young researchers to present their findings at our Annual Meeting. While it is an honor to work with many world renowned lecturers and researchers, our future is with the young researchers. They are the ones who will set the course of implant dentistry," Dr. Lemke says.

An active contributor to the profession throughout his dental career, Dr. Lemke has also published in many dental and medical journals and contributed to chapters in books.

In addition to the new director and secretary, AO members participating in the annual business meeting will elect a new slate of officers headed by **Jay P. Malmquist**, DMD, president; **Clark M. Stanford**, DDS, PhD, president-elect; and **Tara L. Aghaloo**, DDS, MD, PhD, vice president. Continuing on the board are **Amerian D. Sones**, DMD, MS, treasurer; **James C. Taylor**, DMD, MA, immediate past president; and directors **Joseph P. Fiorellini**, DMD, DMSc; **Jeffrey Ganeles**, DMD; **Jörg Neugebauer**, DDS, PhD; **Robert C. Vogel**, DDS; and **Hom-Lay Wang**, DDS, MSD, PhD.



Dr. Jeffrey D. Lloyd

Have Dental Implants Become a Commodity?

By Scott Froum, DDS, Academy News Editorial Consultant

In economics, the definition of a commodity is an economic good or service that has full or substantial fungibility: that is, the market treats instances of the goods as equivalent or nearly so with no regard to who produced them¹.

Commoditized products, typically, are in great demand, are not differentiated well, and are in great supply to meet the demand. Once the product differentiation is lost, in either its function or functionality and is readily available in the marketplace, that product has become commoditized. This trend has already affected the medical community, where "Doctors" who used to offer medical services are now "Providers" who provide commodities that can be price compared with other providers. In dentistry, commoditization has touched many facets of services provided, including teeth whitening, clear braces, and dental implant therapy.

This article will examine the process by which medical services have become commodities and how this trend has affected the way dental implant treatment is practiced.

There are three major factors driving the commoditization of a medical service that can be extrapolated to fit the dental implant model. First, the medical service provided must have a high success rate, regardless of the practitioner performing the procedure, in addition to being performed on an outpatient basis². According to Dr. **S.R. Joseph**, an artificial heart transplant is a specialized procedure requiring sophisticated training, with the potential for many complications. The patient would be prudent to care more about the surgeon's training over the out-of-pocket cost of the procedure. Artificial heart transplants, to date, have not become a commodity. The same cannot be said about dental implants. According to the literature, dental implants typically enjoy a high survival rate, and although complications can occur, they seem to be few and far between³. In fact, of all implantable medical devices in the body, dental implants have some of the highest long-term survival rates reported in the literature.

A pivotal study resulted in dental implants becoming more accessible to non-specialist dentists, when it was demonstrated that implants placed in a clean office setting had the same success rates as implants placed in a sterile hospital setting⁴.

In addition, technology has made dental implant surgery easier for practicing clinicians by making surgical placement protocols less stringent, as well as modifying implant surfaces for more predictable integration⁵. All of these factors have increased the incentive for general practitioners to become involved in all aspects of implant dentistry.

The second factor driving the commoditization of a medical service is the abundance of providers offering the service at discounted fees. By 2020, it is estimated that 3.5 million implants will be sold in the United States⁶. A large percentage of implant therapy will be provided by general practitioners, making dental implant therapy more accessible to the patient population⁷. Couple this with television, radio, internet, and newspaper advertisements offering dental implant therapy at discounted rates, and you have the formula for turning dental implant treatment into a commodity in the eyes of the public.

The final factor driving commoditization of a medical service is related to the name used to describe the medical procedure. According to Dr. **Parvez Dara**, a medical procedure can become a commodity by simplifying its name as a means of debasing it. The healthcare industry has changed the esteemed name of "Doctor/Physician" to "Provider," which has, unfortunately, resulted in a diminished perceived value⁸. Similarly, "botulinum toxin A injections" may require more skill, in the public's view, than



Dr. Scott Froum

Continued on page 14

¹ M. Nicolas Firzli & Vincent Bazi (2011). "Infrastructure Investments in an Age of Austerity: The Pension and Sovereign Funds Perspective." *Revue Analyse Financière*, Volume 41. Archived from the original on 17 September 2011. Retrieved 30 July 2011.

² Joseph, S. R. "The 'commoditization' of medicine." *The Journal of Cardiovascular Management: the official journal of the American College of Cardiovascular Administrators* 9.3 (1998): 26.

³ Levin L, Sadet P, Grossmann Y. A retrospective evaluation of 1,387 single-tooth implants: A six-year follow up. *J Periodontol*. 2006;77:2080-2083.

⁴ Scharf, David R., and Dennis P. Tarnow. "Success rates of osseointegration for implants placed under sterile versus clean conditions." *Journal of Periodontology* 64.10 (1993): 954-956.

⁵ Buser, Daniel, et al. "10-year survival and success rates of 511 titanium implants with a sandblasted and acid-etched surface: a retrospective study in 303 partially edentulous patients." *Clinical implant dentistry and related research* 14.6 (2012): 839-851.

⁶ <https://idataresearch.com/product-category/dental/dental-implants>.

⁷ <https://decisionresourcesgroup.com/report/574719-medtech-dental-implants-medtech-360-market-insights>.

⁸ <https://jedismedicine.blogspot.com/2014/04/commoditization-of-medicine.html>.

"Botox injections" – a commodity that is safe for the public and offered at discounted rates by all types of healthcare providers⁹. Similarly, even though osseointegrated titanium surgical dental fixtures cannot be found on Groupon, offers for dental implants certainly can be.

What are the possible implications for implant dentistry becoming a commodity? First, reimbursement rates for dental implant therapy may be subject to change. There are many factors to consider when determining usual customary and reasonable (UCR) rates of reimbursement¹⁰. Decreasing implant prices can certainly affect this calculation. Second, interaction between the front office and the potential implant candidate may change. A survey of 100 dental offices that placed dental implants, asked the question: "What is the most common question asked by a potential implant patient?" The number one answer was "How much do you charge for an implant?" Finally, the clinician who places/restores the dental implant is no longer important in the overall equation when determining price point. Looking at this simply from an economic perspective, if patients believe implants are a commodity, the doctor's training, front/back office staff, office location, office environment, etc. will play no role in determining whether to proceed with treatment.

In summary, in the words of Dr. **Paul Rosen**, a periodontist in private practice and recipient of the American Academy of Periodontology's Master Clinician Award:

"There is a trend in thought that all implants are alike and that there is not much difference in the services

provided from one clinician to the next with dental implants. Hence, patients feel that bargaining for the best possible fee is not unreasonable. In my opinion, nothing could be further from the truth. I feel that there are differences between the dental implant that may be selected (i.e., alloy versus commercially pure) and in the manner that one clinician may approach the patient's problem versus another. While patients may try to bargain for the "best" (i.e., the cheapest) fee, I am not a fan of this. For example, many times a patient is not comparing similar circumstances or services. If I am able, for example, to extract a tooth and place an implant in a single setting and have a long-term successful outcome, this is far different than getting the service from someone else who might be charging less but doing this with a delayed approach. While the latter may appear to be cheaper, this never accounts for a patient's time. If the patient has added visits, including those that involve surgery, along with more lost time from work, are they really paying less for their care? Has this commoditization been good for the dental implant industry? While more people are better aware of dental implants today and more are being treated with the service, I do overall question whether the average patient is receiving the same level of care. I feel that this can be qualified by the percentage of problems which are on the rise and this in part relates to the fundamental belief that implants and the care are commodities."

⁹Mello, Susan. "Selling a super cosmeceutical: Contextualising risk in direct-to-consumer advertising of BOTOX® Cosmetic." *Health, Risk & Society* 14.4 (2012): 385-398.

¹⁰<https://www.dentaltown.com/magazine/articles/151/how-do-insurance-companies-create-the-ucr>.

AO University Partnership Program gains global partners

(Continued from page 11)

all specialties. In addition, Dr. Sones represents AO in a partnership with the Academy of General Dentistry (AGD) regarding AO support of a pilot implant surgical hands-on program for senior dental students. This new partner activity slated for April 2019 is important, as it is student driven and AGD requested.

The Academy welcomes all dental schools to become AO Global University Partners. Interested schools should see AO's website, which includes a program application and program support request form: <https://osseo.org/global-university-program/>.

Students who attended the Great Transition event included (from left): Shea Santos, Pooja Kapoor, Jing He, Audrey Morrison.



Seeing the Meter by the Dash Board Light

By Bruce Barr, Academy News Guest Contributor

It was early in the morning when Doug Schifter parked his taxi, climbed the steps of Manhattan's City Hall, then shot himself in the head. Soon thereafter, Yu Mein Chow was fished from the East River, his suicide followed by the deaths of at least three other cabbies, as they took their lives in desperation over the disruptive change in their industry.

Due to Uber and Lyft, a New York taxi medallion, once fetching over a million dollars, could now be had for just \$200,000. For those who borrowed to buy at peak value and worked long hours for years, income was down while debt remained. This crisis was not relegated just to New York cabbies, for taxi drivers from Chicago to Portland have reported gutted income following the adoption of ride hailing apps. They are all working longer hours, for less money, to cover mounting bills. Even though Yellow Cab drivers are recognized as licensed and vetted, all people want are fast, cheap rides.

Many dentists competing with non-ADA sanctioned implant experts/specialists can relate to the cabbies' plight. The cab business will never go back to the way it was and neither will implant dentistry. The public does not know a periodontist from a podiatrist, so unsurprisingly, many patients prioritize price over the source and depth of a practitioner's expertise. Today, anyone with a car can be a taxi driver and anyone with a dental license can proclaim himself or herself an implant master.

Although the meter for university trained specialists has yet to run out and there is no mass movement to ingest Flavor Aid (Kool Aid was never present in Jonestown), the profusion of experts, in some ways diminishes, to the public, the value of the ADA specialty certification. These practitioners, some of whom have incurred hundreds of thousands in debt, often look with condescension upon non-accredited peers. However, there is no denying many general practitioners are quite adept in the delivery of care, even though they may not view cases through the same lens as a specialist.

At least ten types of visual sensors exist in the animal kingdom, with some able to detect ultraviolet light and lower forms, like box jellyfish, having sophisticated lenses but not clear vision. All developed to seek light, but none see the full spectrum. It is critical, at this time of industry disruption, that AO has

the vision to focus on establishing itself as a venue agnostic to educational provenance.

Our meetings need to be welcoming to all who strive to learn, improve, and advance our field, by exploring multidisciplinary techniques and providing a forum for discussion of state of the art clinical ingenuities. There is no dark dystopian implant future - just a different one than ADA-sanctioned specialties originally envisioned.

As John Newman said about 150 years ago, "The general principles of any study you can learn from books at home but the detail, the color, the tone, the air, the life which makes it live in us, you must catch all those from those in whom it lives already."

Regardless of your mode of transportation, consider hailing a ride to the AO meeting this year in Washington, DC. Come to the light.

Dr. Bruce Barr is a periodontist and previous Editor of Academy News.



AO Leadership Institute to be launched in Washington, DC

In a strategic initiative to help cultivate and develop future leaders, the Academy of Osseointegration (AO) will be holding the AO Leadership Institute for a select group of AO members from across all specialties and all regions of the globe.

To be held on March 13, 2019 in advance of AO's 2019 Annual Meeting, this one day "Leadership Success Workshop," sponsored by Nobel Biocare, is designed to help AO's future leaders:

- Increase understanding of leadership essentials
- Develop tools for more authentic leadership
- Improve skills in coaching and mentoring staff
- Heighten skills in influencing positive change
- Grow commitment to all around excellence
- Effectively manage teams

"As part of our current strategic plan, AO's Board of Directors believes as with any successful global organization, the Academy needs to continually cultivate and challenge good leaders," said AO President Dr. **James C. Taylor**, who himself is a graduate of a MA program in leadership. "Our inaugural Leadership Institute is the start of AO's initiative to provide an opportunity for selected AO members from around the world to develop their leadership and management competencies."

After exploring many provider options, AO's board and staff has selected Bold New Directions Training Solutions to facilitate the inaugural Leadership Institute. This transformational learning organization, based in Southampton MA, provides training solutions in North America and beyond through a network of 14 offices across North America.

A selected list of 20 candidates - primarily AO members who have successfully led AO committees and task forces, have been invited to participate in this key program.

"We look forward to our inaugural Leadership Institute, which will develop AO leaders that will continue to build on our recognized role as the premier global academy for scientists and clinicians engaged in evidence-based osseointegration and implant dentistry," concluded Dr. Taylor.

AO events and CE calendar



2019

March 5

Live Webinar: "Immediate Loading Techniques for Complete-arch Implant-supported Prosthesis"

Burak Yilmaz, DDS, PhD

March 13 - 16

AO 34th Annual Meeting: "Current Factors in Clinical Success" Walter E. Washington Convention Center, Washington, DC

March 28

Live Webinar: "Prevalence of Peri-implantitis - Global Burden of Disease?"

Jan Derks, DDS

April 4

Live Webinar: "New Concepts in Guided Implant Surgery"

Gary Orentlicher, DDS, MD

April 18

Live Webinar: "Reconstruction of Hard-tissue Defects After Implant Removal"

Mauro Merli, MD, DDS

April 24

Live Webinar: "Implant Overdenture: The Past, the Present and the Future"

Eva Anadioti, DDS, MS

May 4

"A Tribute to the Toronto Conference and Its Impact on Global Dentistry" University of Toronto

Moderator:

George Zarb, CM, DDS, MS, FRCD(C), PhD, DSc, MD

Program:

"Peri-Implant Soft Tissue: Where Biology Meets Technology"
Carlo Ercoli, DDS

"The Evolution of Prosthodontic Dental Implant Management From 1982 to the Present"

Izchak Barzlay, DDS, MS, FRCD(C)

"The Evolution of Our Understanding of Osseointegration"

Niloufar Khosravi, BSc, MSc, PhD

"The Evolution of Hard Tissue Management"

Lesley David, DDS, DipOMFS, FRCDC

June 12

Live Webinar: "Managing Implant Complications"

David Harris, RCS, RCSI

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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



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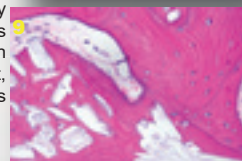
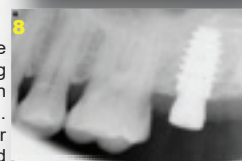
As the OsteoGen® crystals are resorbed and replaced by host bone, the site will become radiopaque.



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





Five things I need from my periodontal partners

By Harry Randel, DMD, Academy News Guest Contributor

I decided to take a slightly different direction and involve my staff in identifying the five things I need from my periodontal partner. Although their answers were very similar and had a common theme of communication and coordination, here is what they offered from their perspective.

Hygienists – Danna, Cristelle:

1 Offer the patient the most up-to-date technology and surgical procedures. This may include CBCT, LANIP, connective tissue grafting, and tissue regeneration.

2 Communicate treatment protocols to our office. Are re-care appointments alternating? Post-laser treatment, which areas should be avoided? Is periodontal therapy being recommended and does oral hygiene need to be reinforced at re-care appointments in our office? Are there special instructions in caring for recently placed implants?

Front office – Susan, Michele:

3 Sharing of information. Make sure pertinent information is available for the patient's appointments in our office. This would include radiographs, periodontal charting and digital workflow. Facilitate clear, shared, coordinated communication between the restorative dentist, the periodontist, the patient, and the office staff at both offices.

Assistants – Janine, Alyssa:

4 Discuss the patient before the appointment. While we should not be led down someone else's treatment plan path without having input, we should know about the

patient. If a patient is going to lose a tooth or an arch of teeth, is there an emotional component, to which, we as a team, need to be sensitive? How prepared is the patient for treatment?

As a team:

5 Synergy: The creation of a whole that is greater than the simple sum of its parts is achieved by working as a team. A Jack-of-all-trades is a master of none. "Elevate the bar" by educating each other and the patient when planning and executing treatment. The patient's best interest is paramount.

In conclusion: Excellent treatment results are not just about the doctors' skills. They depend on the entire team working together.

Dr. Harry Randel is a prosthodontist in private practice in Philadelphia, PA. This article is part of a planned series on five things I need from my referring dentist.



Dr. Harry Randel

What I've learned from football

By Harriet K. McGraw, DDS

I love football! Whether it's college (Go Blue!) or pro ball, I love the game. As with any sport, I have favorite teams, players and coaches. Winning is important, but it isn't everything. Some teams have stellar records but have unscrupulous coaches and players who lack character. The teams and players I respect and admire most are the ones that win through a combination of superior skills, leadership and good sportsmanship. Looking more closely at what sets them apart, there are several common attributes that can translate into a blueprint for a successful dental practice. These are my observations:

Leadership through example: Drew Brees, quarterback for the New Orleans Saints and Super Bowl XLIV MVP (most valuable player), with numerous National Football League (NFL) records, is a prime example of a true leader. Being blessed with exceptional athletic ability has not been enough to keep the 40 year-old at the top of his game for the past 18 years. He is disciplined in his practice and workout regimens, being the first to show up for practices and the last to leave. Brees gives credit to his teammates for the many successes and records he has achieved. As a result, those same teammates are not only inspired to train harder but also put their faith and trust in him while on the playing field. They share a mutual respect.

Teamwork: Bo Schembechler, legendary coach of the University of Michigan Wolverines, was famous for numerous quotes, one of which was "The team, the team, the team!" Those words have taken on more meaning, for me, over the years. Bo showed his players that by putting the collective good ahead of one's self-interest they could all be champions.

Humility: Showboat players with loads of talent can be fun to watch, but their antics are displays of attention-seeking behavior rather than the actions of someone who puts team first. Players who are boastful and make disparaging comments about opponents provide the other team with locker room quotes that can be used as motivation when preparing for games against the braggart's team.

In our dental practices, we are team leaders who set the tone for the entire office by creating an energy that is beneficial to coworkers and patients alike. By arriving early, being prepared and communicating clearly and respectfully with others, we set an example for appropriate behavior.

As with any team, assembling the right players/staff members is critical to success. A compliment or kind word to staff members who assist in making the day run more smoothly or aid in accomplishing a difficult task, goes a long way toward building their confidence and inspiring them to achieve and contribute more to the well-being of the practice.

Patients are keenly aware of the interactions between doctor/staff and amongst staff members and are put at ease when they know their comfort and care is everyone's primary focus. Having the doctor share the credit with staff, following successful completion of a challenging treatment plan, boosts the doctor's and the staff's credibility. Similarly, by not speaking disparagingly about another dentist, it also puts one in a more favorable light.

Football teams and dental teams share qualities that form the foundation for success: leadership, teamwork and humility.

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.





THEIRS

1. Place implant.
2. Use reamers to remove and reshape bone, or find a compromise in implant placement between the mesial-distal aspect of the bone.
3. Use every trick in the book to make it work.



OURS

1. Place the OsseoSpeed Profile EV implant at an angle and see how the implant neck aligns with the anatomy.

Images for illustrative purposes only.

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