Dr. Tomas Albrektsson to receive 2014 Nobel Biocare Brånemark Osseointegration Award

Tomas Albrektsson, MD, PhD, ODhc, Gothenburg, Sweden, a close co-worker with Dr. Per-Ingvar Brånemark in the development of osseointegrated dental implant treatment in the 1980s, is the seventh recipient of the Nobel Biocare Brånemark Osseointegration Award. The award is given annually by the Osseointegration Foundation (OF) to honor an individual whose impact on implant dentistry is exemplary in any or all of the Foundation’s mission categories: research, education, and charitable causes.

OF President Dr. Luis J. Fujimoto, New York, NY, will present the award Saturday, March 8, at the end of the Academy’s annual business meeting at the Washington State Convention Center in Seattle.

Previous Nobel Biocare Brånemark Osseointegration Award honorees are Professor Brånemark (the first honoree), Drs. Daniel Buser, William R. Laney and George A. Zarb, and Professors Daniel van Steenberghhe and Ulk Lekholm. The award is made possible by a grant from Nobel Biocare. The selection process involves members of the Osseointegration Foundation’s Titanium Society to propose distinguished candidates from the field of implant dentistry.

“The Foundation is proud to present this award to such a deserving honoree. Dr. Tomas Albrektsson is one of the trailblazers in our field. His record of leadership in implant dentistry has been recognized worldwide, with awards and honors in Europe, Asia, South America, and North America,” says Dr. Fujimoto.

“The Nobel Biocare Brånemark Osseointegration Award is the highest honor bestowed by the Foundation. It is our pleasure to have this opportunity to recognize Dr. Albrektsson’s accomplishments as a leader, teacher, and researcher in the field,” Dr. Fujimoto adds.

Dr. Albrektsson, 68, was Professor and Head of the Department of Handicap Research (now called Department of Biomaterials), Department of Clinical Sciences, University of Gothenburg, from 1986 to 2012. He is now visiting professor at Malmö Dental University.

...continued on page 5
President’s Message

My goals as President: grow AO membership, at home and abroad

By Stephen L. Wheeler, DDS

It has been an honor and a privilege to serve as the President of the Academy of Osseointegration this year. I joined this organization 20 years ago and later volunteered to be on the board, as I believed the AO was the premiere dental implant organization in the United States. I now believe this to be true for not only the United States, but worldwide. Even though our organization started as a small study club, it was based on techniques and technology from Europe, specifically Sweden. The AO has always sponsored one of the most comprehensive annual meetings on dental implants and found the need to continually bring in top speakers from around the world to accomplish this goal.

As our international membership has now grown to over 20% of our 6,000 members, we have been approached by other international organizations to join with them in promoting excellence in patient care with the most recent evidenced-based techniques. The AO, an international organization based in the U.S., has had a difficult time determining how best to accomplish this, while maintaining the excellence of our annual meetings and not diluting the value to our existing members.

When I started my year as President, besides trying to maintain the elite status of the AO and our Annual Meeting, I had two goals: to grow the AO membership at home and abroad. There have been many tiers to these efforts, including hiring an outside PR firm and setting up new task forces and committees, but my main focus has been on expanding our outreach internationally and into the general dentistry population. While the AO started as a specialty organization advocating the team approach to implant dentistry (and we will continue to do this), as times have changed and implant dentistry has become a mainstream standard of care, the general dental population has become an integral part of this team. Even if dental practitioners are not practicing implant dentistry today, patients are constantly walking into their offices needing follow-up or continued implant care. Everyone needs to understand how best to treat these patients and/or when to refer. This, of course, is the theme of our annual meeting: “Real Problems, Real Solutions,” which should provide essential information to all dentists, no matter what their level of involvement.

One of the planks of our recent Strategic Plan is to find ways to recruit and retain general dentists who presently make up approximately 15% of our membership. For this purpose, we established a General Practitioner Recruitment Task Force under the lead of Dr. Steven Rosenstein. We have already and continue to sponsor symposia at other dental meetings which cater more to the general practitioner, and look forward to playing an important role in the upcoming Greater New York Dental Implant Conference. Our hope is to present more basic and advanced implant concepts, supported by evidenced-based research, along with information important to those who have not had formal or advanced training in surgery, following the Academy of Osseointegration’s Guidelines for the Provision of Dental Implants. This information, not readily available at our annual meetings, can also be provided at our Residency lecture programs and potential Regional Meetings. As many of our non-specialty trained dentists are looking for certification, we have embellished the AO Fellowship program and are attempting to set up a Master’s program as well.

My hope is that with better training the general dentist can take a more active role within the implant team. At the same time, we continue pursuing AO’s unique role in sponsoring consensus conferences to provide critical insights into patient care. Our next conference: “Current Best Evidence for Minimal Intervention in the Management of the Edentulous Maxilla,” will be in August of this year. Only in this manner can we hope to provide the best in patient care at all levels.

Implant dentistry not only spans all levels of dental care, but all international borders as well. I have had the opportunity to travel around the world lecturing and attending conferences, and the knowledge and expertise in this field is in no way limited to North America. As I mentioned earlier, the AO has realized we need to expand our influence internationally as well, we just did not know how to proceed. I am excited that

“The AO has always sponsored one of the most comprehensive annual meetings on dental implants and found the need to continually bring in top speakers from around the world to accomplish this goal.”

…continued on page 3
the AO Board approved several concepts put forth by our Global Program Development Committee, aided by input from some of our Corporate Sponsors, and we started implementing them two years ago.

We had our first International Charter Chapter meeting in 2012 in London, England, chaired by Dr. Michael Norton, and now have had a follow-up meeting last year chaired by Dr. Steve Jacobs, both of which were extremely well received and resulted in a number of new AO members. By the time you read this article, I will have returned from Tel Aviv, Israel where I will have presented to their first Charter Chapter meeting, chaired by Dr. Zvi Artzi. We also have a co-sponsored program set up in January of 2015 with the DPU in Pune, India through the efforts of Drs. D. Gopalakrishnan from Pune and George Romanos. Dr. Ryo Jimbo and his study club in Japan are also working to set up another Chapter there.

On yet another international front, the AO has become a member of the FDI specifically through the efforts of Dr. James Taylor. Under the leadership of Dr. Michael Norton and the GPD committee, a group of three international lecturers presented to a standing room only crowd at the FDI World Symposium last August in Istanbul. As we begin to take a more active role in this organization, we are planning another sponsored symposium in India for the next World Symposium, which will hopefully help to build our relationship with DPU in Pune.

Alongside the international outreach above, I have been working for three years on the first AO International Symposium dedicated to a single international country or region. By far the largest international membership in the AO comes from our colleagues from the Pacific Rim, Japan leading the way. Even though our international attendance at the annual meetings is consistently around 20%, one of our biggest barriers is language. This makes it difficult for our international lecturers to present comprehensively in a second or third language, and for them to understand any significant part of the other presentations during the rest of the meeting. Realizing that key opinion leaders from many of these countries have important insights they could share with us, the concept to set aside a full half day symposium within the Annual Meeting for these key individuals to present in their native language was formed.

I have had several visits to Japan both for presentations and live surgical demonstrations, and was happy to travel again to Tokyo this past summer to represent the AO and promote our Annual Meeting and our International Symposium in Seattle, which will be dedicated to our Japanese colleagues. The OJ study club based in Tokyo has been instrumental in assisting us in getting this put together. They, along with several other study clubs and our five corporate sponsors (Biomat 3i, DENTSPLY Implants, Geistlich Pharma AG, Nobel Biocare USA and Quintessence Publishing Co.) have recommended speakers who have enthusiastically accepted this opportunity. We are honored to have Dr. Yataro Komiyama, the head of the Bränemark Osseointegration Center in Japan, as our moderator. We will also be providing English to Japanese translation for our main podium presentations during the rest of the meeting. I am excited to see all of our efforts finally come to fruition, and hope this symposium meets with a resounding success and becomes a model for future endeavors with both Japan and other international groups.

As I near the completion of my presidential term, I continue to be astonished at all that the AO has become, and extremely excited about where we are headed. I wish to thank the AO staff, the AO Board of Directors, and all of the participants in our committees for their time and efforts to keep this organization at the leading edge of our profession. I encourage others, who have not had the opportunity to stand shoulder to shoulder with the outstanding members of our organization, to participate on our committees, task forces, or the Board as we continue to move forward. Thank you again for the opportunity to serve as your president. I am honored to have had the opportunity to “stand on the shoulders” of the many amazing individuals who have preceded me!

**Member News**

**AAP honors Dr. Cochran; Dr. Amet receives ‘Significant Sig’**

The American Academy of Periodontology (AAP) recognized AO Past President Dr. David L. Cochran, San Antonio, TX, with its Distinguished Scientist Award. AAP cited Dr. Cochran for his contributions “as a scholar, educator and leader,” noting that he has authored 2 books, 12 book chapters, and over 100 publications on dentistry, periodontology, and osseointegration.

Sigma Chi Fraternity has honored Dr. Edward M. Amet, Overland Park, KS, with its “Significant Sig Award,” the International Fraternity’s highest recognition for achievement in a brother’s professional career and civic endeavors.

Congratulations, Drs. Cochran and Amet!
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Artzi reports “What is important is the implant success rate over time, as reported by the Sinus Consensus Conference, a 95% cumulative success rate over 5 years has been found with pure alloplast OsteoGen®.” Artzi further noted that “OsteoGen® is physicochemically and crystallographically equivalent to human bone making it a pure alloplast. The spaces between the crystal clusters facilitate cellular and tissue proliferation within the graft material, thus enhancing faster osseointegration.”


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Take your meeting mobile

By Terri Vargulich, Marketing and Communications Manager

Enhance your experience at this year’s Annual Meeting with the upgraded AO 2014 Annual Meeting mobile app. The app is free and offers state-of-the-art features to plan and organize your meeting schedule and personal time in Seattle – all in the palm of your hand!

This new app is available for all smart phone and tablet formats, and an HTML5 version is available for desktop use. Simply enter this link: http://www.tripbuilder.com/ao2014 into your phone or tablet browser. This link will automatically detect your device type and take you to the right place to download the app. Or just snap the QR code and download the app now.

With the 2014 mobile app, attendees can:

• Preview all sessions and events by clicking the Schedule icon and see detailed information including locations, descriptions and speakers.

• Use interactive floor plans for easy exhibitor/booth location and navigation around the convention center and exhibit hall.

• Search for specific speakers to confirm time and location of their sessions.

• Review the complete listing of Poster Presentation Abstracts.

• Search for exhibitor by name or booth number and view their website.

• Search destination information about Seattle, such as recommended restaurants, local attractions, and weather statistics.

• Add items to your personal MyShow lists, which include a personalized schedule, contacts, exhibitor booths, notes and Seattle city information.

• Use the Show Daily and Social Media icons to catch up on the latest news from the meeting and to easily interact on both AO social media channels, Facebook and Twitter.

• Receive instant alerts to all updates to the meeting program, sessions and events, as they occur!

The AO 2014 Annual Meeting mobile app is supported by a grant from Zimmer Dental.

Nobel Biocare Brånemark Osseointegration Award …continued from page 1

Dr. Albrektsson is Editor-in-Chief of Applied Osseointegration Research, a scientific monograph. He is editor of 10 scientific books and member of the editorial board of 8 international scientific journals. He holds several patents in the field of biomaterials and is author of about 675 abstracts, reviews and scientific papers on bone grafts, vital microscopy of bone, experimental implants, oral and craniofacial reconstructions, and orthopedic implants. One of his papers was honored as best paper of the year 2000 in the International Journal of Oral & Maxillofacial Implants (IJOIM). He has been supervisor or co-supervisor of 45 PhD theses and has given more than 1,000 invited lectures to professional audiences worldwide.

The identification and nomination of the Nobel Biocare Brånemark Osseointegration Award recipient is by the members of the Titanium Society, a special category of donor membership created to help the Foundation achieve its goals. Recipients of the award are then selected by a committee comprised of the president and immediate past president of both the Academy and the OF and Dr. Brånemark, for whom the award is named.

All Titanium Society members and a guest of their choice are invited to attend the Annual Titanium Society Breakfast Meeting, Saturday, March 8, at 7:00 a.m., where Dr. Albrektsson 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. The Titanium Society’s membership is limited to 100. Anyone interested in becoming a Titanium Society member may find a downloadable membership application on the OF section of the Academy’s website (www.osseo.org) or by contacting the Academy’s Executive Office at 847-439-1919, or by email at academy@osseo.org.
Four speakers confirmed for first AO Charter Chapter meeting in India

Four speakers have been confirmed for the first meeting of AO’s Charter Chapter in Pune, India, scheduled for early in 2015, announced Global Program Development Committee Chair Dr. Michael R. Norton, London, England, UK. The four speakers and their topics are:

- Dr. Georgios E. Romanos, Stony Brook, NY (periodontist), immediate implant therapy;
- Dr. Fernando Rojas Viscaya (prosthodontist), location, Spain, treatment planning, focusing on restoratively driven implant dentistry;
- Dr. Hugo de Bruyn (periodontist), Ghent, Belgium, overdenture therapy, with results from long-standing and extensive clinical trials;
- Dr. Michael Norton (oral and maxillofacial surgeon), decontamination of the ailing implant and reparative therapies.

“We look forward to the interaction with speakers from India, promoting the country and the new opportunities we see there,” Dr. Norton says.

The meeting will be held in the Dr. D. Y. Patil Vidyapeeth (DPU) University, Pune, a facility on the west side of India, which fulfills AO’s expectations for teaching, research and development. According to the mission of the DPU, its goal is to contribute to the socioeconomic and ethical development of the nation by providing high quality education through institutions that have dedicated faculty and state-of-the-art infrastructure, and are capable of developing competent professionals and liberal-minded citizens.

For this AO Indian Charter Chapter, the Global Program Development committee is pleased to be working with the university’s President Dr. P.D. Patil, Dr. K.B. Powar – Chancellor, Dr. P.N. Razdan – Vice Chancellor, as well as Dr. R.S. Dolas – Dean of the Dental College, who have made a commitment to host the AO in this first Indian Charter meeting. Due to these activities, the AO will be promoted in India and participants of the local national dental societies, clinicians and researchers interested in oral implantology are expected to attend.

Drs. Norton and Romanos have been working closely with Dr. D. Gopalakrishnan, Head of the Dept. of Periodontology and Director – Research and Collaborations at DPU, to create a liaison and formulate the program for this inaugural meeting.

The AO Board of Directors hopes that due to the AO outreach activities in India, there will be greater opportunities for the education and practice of implant dentistry.

AO launches Charter Chapter in Israel, with Feb. 20 meeting, organized by Dr. Zvi Artzi

AO launched the Charter Chapter program in Israel with a meeting February 20 at the new Royal Beach Hotel in Tel Aviv. The meeting was organized by Israeli AO Ambassador Dr. Zvi Artzi, Tel Aviv.

Keynote speaker was AO President Dr. Stephen L. Wheeler, Encinitas, CA, who lectured on “Technological Advances: Safety & Predictability.” Dr. Zvi Laster, Tiberias, Israel, spoke on “Biomechanics & Periimplantitis.”

The meeting opened with a cocktail reception, followed by the presentations, and concluded with beverages and refreshments.

“In order to spread the good name of AO and to attract new members, we asked that each member bring at least one guest,” Dr. Artzi says. It is hoped the meeting attracted a number of guests who will sign up for AO membership.

In his presentation, Dr. Wheeler discussed how implants have dramatically changed patient care and how changes in techniques and technology now allow us to achieve more predictable and aesthetic results. His lecture responds to the questions, “How do we sift through the promotions and hype and how can we decide what is safe and predictable for our patients?”

Dr. Wheeler included a brief historical tour of where implant dentistry has come to better understand the past to help us explore the future. “We live and practice in an exciting time with phenomenal ways to restore our patients’ smiles both functionally and esthetically,” he says.

“The AO is uniquely positioned as an organization, with no direct ties to any specialty or corporation, to sift through the marketing and truly evaluate techniques and technologies that are safe and predictable through evidence-based research. It is this knowledge that allows us to effectively provide the best treatment outcomes for our patients,” he adds.
Second AO UK chapter meeting held in London

By Drs. Ben Mather (BSc, BDS, MJDFRCS, DiplIMPDentRCS) and Louis R. Guenin (BDS, LDS, RCS)

Set in the heart of London's bustling and prestigious West End, the second meeting of the AO UK chapter took place at the highly-decorative Savile Club, 69 Brooke Street. Introduced by its global ambassador for outreach, Dr. Michael R. Norton, London, and reinforced by the chapter’s lead, Dr. Stephen L. Jacobs, Glasgow, Scotland, an emphasis was placed on the key features of forthcoming activities and events related to the AO, including the unique position that the UK currently holds—the first to have a second divisional chapter meeting! The introduction of global chapters has been a new and developing AO concept: its aims are to facilitate core ideas with structured and highly useful working meetings, where clinicians can actively voice and discuss research and current treatment trends.

The guest speaker, Dr. Andrew Darwood, spoke on the mastery of imaging; importantly stating, “CBCT allows creativity.” Topics covered included productivity, optimization, interpolation, noise reduction, intuitive extrapolation, and most importantly, understanding and changing threshold values. Can we really justify the exposures needed to see superior accessory canals from mental foramina; neurovascular bundles above fractured central incisors; or root fractures in endodontics? How much does it, or indeed, should it, affect our daily practice and treatment planning?

Whilst CT scanning isn’t routine, Dr. Darwood makes it hard to argue against the routine use of this invaluable tool. The suggestion of surgical guides was generally agreed as not to be used in compromised situations but rather as a ‘practice-builder’ in the non-compromised cases (aiding speed, ease, and running to time margins). We were made aware of guided placement and the potential for huge disasters if some sort of guidance for placement is not employed.

Dr. Darwood has certainly not reached his threshold. The 3D printing and reproduction of surgical guides can still lead to inaccuracies that do tend to matter when fitting guides onto teeth and bone. Calibration is key (phantoms and software) and further tips were welcomed: rescanning with higher resolutions of the model itself, making a radiographic guide on the model and transforming this into a surgical guide.

The session proved extremely valuable and interactive for concise and critical debate. All in all, it was an extremely useful and worthwhile day.

AO’s New Product Showcase features 12 companies

AO’s New Product Showcase, an Annual Meeting feature introduced in 2013, offers a unique opportunity to view the latest products from 12 companies in an intimate social setting, allowing attendees to see demonstrations, view the products up close, and ask important questions.

The Showcase is complimentary to all meeting attendees and their registered guests.

Attendees can pick and choose which companies to visit and may change rooms at any time. Stop by and visit the showcase to see some of the latest products in the field of craniofacial implant technology.

- 3Shape
  - 3Shape TRIOS Digital Impression Taking Solution
- AvaDent Digital Dentures by Global Dental Science
  - AvaDent-on-4
- Bien-Air Dental
  - iChiropro
- Biomet 3i
  - 3i T3™ Implant
  - New peri-implantitis health research and campaign
  - Slim Kit
  - New regenerative material
- Carestream Dental
  - CS 3500 Intra Oral Scanner
- Cool Jaw by Medico International
  - T-430 & T-440 Soft-sided Round Gel Packs
  - T-450 7”x6” Hot and Cold Soft Side Therapy Gel Pack
  - T-900-4 Split Wrap with Chin Cup and Four Clear Cold Gel Packs
  - Oval Hot/Cold Pack 10.25” x 5.25”
- Dentium USA
  - Total Solution for Sinus
- DENTSPLY Implants
  - Astra Tech Implant System™
- J. Morita, USA, Inc.
  - AdvErL Evo
- LightScalpel, LLC
  - Super Pulse Soft Tissue CO2 Dental Laser
- Nobel Biocare USA
  - Digital workflow through NobelConnect™
  - ASC – NobelProcera® Angulated Screw Channel Abutment
  - “New” creos™ allo.gain & creos™ allo.protect
- Straumann USA
  - 4mm Implant
  - Roxolid for ALL
  - SFI Anchor
  - Endogain 015
  - Variobase
Before replying to these questions, I would like to make some important points to help ensure that my answers are viewed in their proper context – that of my working environment.

1. My work revolves exclusively around dental surgery, and I place implants for a number of referrals from whom I receive patients.

2. These referrers vary widely in terms of their expertise and experience in this particular field. Some of them are very involved in and very committed to continuing education programs and courses. For others, implants are just one small aspect of their work. These individuals don’t want to spend much time on ongoing training. This means that sometimes restoration work does not always adhere to generally accepted minimum standards of quality.

3. In France, by law, the profession of ‘dental hygienist’ is not recognized (incredible but true!). This means that general dental cleaning tasks are performed, or should be performed, by dentists. However, it is illegal under French law for a dentist to employ other dentists or to have more than one dentist working for them. This makes it very difficult to ensure that a given patient’s teeth receive systematic, ongoing care and attention when it comes to general teeth cleaning work.

4. I asked my colleague, Dr. David Nisand, who practices in the fields of both periodontology and implantology, to read over what I have written. I would like to thank him for the corrections and clarifications he was able to make.

**Question:** If a 10 mm rough surface implant exhibited 2.5 mm of bone loss with obvious inflammation in a relatively non-esthetic area, do you treat this by nonsurgical, resective, or regenerative surgery, and please describe your protocol regarding time, technique, and materials?

Before doing anything else, I would have to carry out an assessment of the entire mouth area in order to ensure that there hasn’t been a recurrence of a previously-treated periodontal condition or disease.

If this turns out to be the case, these wider issues would have to be dealt with before deciding on a specific course of action to take regarding the implant.

The other important point I’d like to make is that the size of the implant, whether 7 mm or 15 mm, should not influence your decision-making process. Either you’re worried about the infection getting worse and therefore you have to treat it, or else you think that the situation is stable and you leave things just as they are, even when you’re dealing with a short implant.

The decision whether or not to treat the inflammation will depend on the presence or otherwise of medical signs associated with bone loss. If there are no visible clinical signs (in other words, the bone loss has been discovered by chance), it is advisable to do nothing and to monitor the situation every 3 months to begin with, then every 6 months later on. A strict personal oral hygiene regimen should be drawn up. Obviously, the patient has to respect this regimen for it to be effective.

If the bone loss is associated with inflammation and/or suppuration, preparations for a surgical procedure will be made. The patient will be put on an 8 to 10 day course of antibiotics. Then, a full-thickness flap elevation will have to be performed, followed by the removal of granulation tissue and the disinfection or decontamination of the implant surface using an air-powered tooth polishing system and hydrogen peroxide. If there is a bony defect with a proper anatomy – a fairly rare occurrence – a bone substitute or an autogenous bone graft may be used. However, the results are mixed. What’s more, we do not have reproducible results from a large-scale sample of patients. Results can sometimes be quite spectacular, but we have to acknowledge that we are unable to explain why this procedure works so well in some cases, whereas generally speaking, the procedure is considered successful if it simply stops any further bone loss.

NB: Normally probing pocket depth would be used in the decision-making process. I haven’t mentioned it because it is sometimes quite difficult to gather reliable pocket depth measurement around the implant. In fact, the emergence profile of the prosthesis very often makes it difficult to use the periodontal probe properly. In the best case scenario, peri-implant probing would be possible with all implant-supported prostheses. What’s more, in order to improve patient monitoring, it would be advisable to perform a pocket depth measurement on the day that the implant-supported prosthesis is fitted. This could then be used as a benchmark against which subsequent follow-up examinations using the probe could be compared, providing us with an objective measure of the extent to which pocket depth has grown as a result of an inflammation.

**Question:** If this same 10 mm implant had 50% bone loss, how do you most often treat it and what are your usual results?

If the bone around an implant has lost 50% of its length, the surgical and decontamination procedures described earlier would be performed, with check-ups 6 and 12 months later.

...continued on page 9
Dr. Franck Renouard …continued from page 8

All too often, results are disappointing and the implants have to be removed. Some implants are kept in place for a little longer, but most of the time, the removal of the implant is inevitable. Of course, we’re not very happy with this outcome, but when we ask experienced colleagues for their advice with regard to this private practice scenario, they frequently agree that it would be their solution as well.

**Question:** Assuming you can satisfy a patient’s esthetic and function requirements, how often do you choose to bury an implant in an attempt to regenerate bone? How successful are you?

From a theoretical point of view, surgically burying the implant would seem to be absolutely vital in order to achieve osseointegration for a second time with regard to an implant that has been contaminated. However, this view is not backed up by the relevant scientific literature, which shows no discernible difference in results between the buried and the non-submerged techniques.

From a clinical point of view, we must always bear in mind that burying an implant for a second time in an environment frequently affected by inflamed tissue is a complex and unpredictable procedure.

When it’s possible to bury an implant a second time round, the use of resorbable membrane to cover bone filler material does not give particularly impressive results. When it does work, sometimes the result is bone that is indistinguishable from native bone. However, most of the time the result is more akin to ‘very dense, fibrous tissue’. Perhaps this will turn into bone later on? The best solution would be the systematic use of nonresorbable membrane. However, the incidence of complications and adverse events associated with this procedure is too high, especially in relation to patient esthetics. It’s very difficult to attain tension-free primary closure due to the fragility and inflammation of the mucous membrane.

**Question:** Assuming cement is an issue with observed implantitis soon after the restorative phase, do you often perform surgery to assure removal? How do you address costs with your patient and restorative dentist, if any?

The systematic use of cemented implant-supported prostheses has always seemed somewhat incongruous. There are some circumstances in which the cemented implant-supported prosthesis is clearly the best solution, but we would encourage our referrers to use the screw-retained option wherever possible.

Sometimes, there is a failure to remove all of the residual excess cement used in cement-retained prostheses. Generally speaking, you won’t have long to wait before seeing the consequences of this. After a few months, the patient returns, suffering from a gingival abscess. By this stage, surgery cannot be avoided, sometimes resulting in ugly tissue loss.

We have noticed very encouraging signs in terms of tissue response if the problem is treated at a very early stage.

However, sometimes the lesions cannot be repaired and we find ourselves with a worsening case of peri-implantitis. To be perfectly honest, we have also noticed bone loss with screw-retained prostheses in cases where the screw was manually tightened. Some dentists don’t ‘dare’ to tighten the abutment screw to the manufacturer’s recommended torque setting. In this case, it will only be a matter of time before it comes loose. If the patient delays coming to see the dentist, you may end up with exactly the same problem as that caused by the presence of excessive residual cement.

We will cover the cost of treating the soft tissue lesions and also of replacing the implant if this turns out to be necessary. However, we do not treat any of the biomechanical complications that may arise if the abutment screws come loose under a cemented crown, especially if a screw-retained prosthesis could have been fitted instead. Often the prosthesis has to be broken before it can be removed. In this case, the patient’s practitioner must perform the relevant work as well as covering the cost of that work.

**Question:** Although it has only been a few years to compare, have you formed an opinion on a difference between platform switched and non-platform switched implants regarding mucositis and peri-implantitis and/or bone loss?

We should firstly remember that there is very little formal scientific research demonstrating that platform switching has a positive impact in terms of the preservation of bone levels. In fact, the findings have sometimes been somewhat contradictory, and it is still too soon for us to assess the usefulness of this research. Conversely, when positive impacts have been noted, these have been minimal.

This is why it’s difficult to understand the enthusiastic response to the concept of platform switching. There’s a feeling that people are looking for a solution to a non-existent problem.

Let’s re-frame the question in a slightly different way: is an initial crestal bone loss of 1 mm a risk factor over the long-term? I have 25 years of experience in this field, during which I’ve placed multiple implants. I would not consider crestal bone remodeling to be a source of potential problems.

It does seem that this 1 mm of peri-implant bone loss has rapidly become a commercial issue. How many lab animals, in particular dogs, have been sacrificed on the altar of this sacred 1 mm of peri-implant bone? From a purely medical point of view, this whole debate seems something of an irrelevance. If we look at the figures for bone loss associated with various implant systems over the mid to long-term, there’s virtually nothing to separate them.

Furthermore, this issue arose out of studies of different implant systems in which one-stage procedures were compared with two-stage implant surgery procedures. This approach isn’t exactly a model of scientific objectivity. If we say that platform switching has a 0.5 mm effect on bone level,
AO’s 2014 Summit Conference
will create 3 key deliverables

Good progress is being made on the AO’s 2014 scientific summit meeting, Co-Chair Dr. Clark M. Stanford, Iowa City, IA, reports. “We will be creating three key deliverables from the summit,” Dr. Stanford says. Headed “Current Best Evidence for Minimal Intervention in the Management of the Edentulous Maxilla,” the summit will be held in August 2014 in the Chicago area.

The summit’s three key deliverables, according to Dr. Stanford, are:

1. Systematic reviews concerning outcomes related to management of the pendulous maxilla. These reviews are based on work from five working groups that address the following content areas: Role of site development, implant design, imaging, advanced biologics, and prosthetic interventions.

2. From the set of systematic reviews, a set of clinical practice guidelines are being crafted, with a ranking of the literature support and an outline of further research that is needed.

3. The third key deliverable will be to then rank the degree of experience needed by the entire clinical team to implement the clinical practice guidelines at the level of outcomes documented in the literature.

The Academy has been active in sponsoring consensus conferences for many years. The planning committee has outlined five domain areas from conventional dentures to complex bone graft and implant supported prosthetics.

Co-Chair with Dr. Stanford is Dr. Ole T. Jensen, Greenwood Village, CO. Group chairs and the planning committee include Drs. Tara L. Aghaloo, Los Angeles, CA, Thrushul Allereddy, Iowa City, IA, Gustavo Avila-Ortiz, Iowa City, IA, Lyndon F. Cooper, Chapel Hill, NC, Kent L. Knoerschild, Chicago, IL, Craig M. Misch, Sarasota, FL, Georgios E. Romanos, Stony Brook, NY, Daniel B. Spagnoli, New Orleans, LA, and James C. Taylor, Ottawa, ON, Canada.

Attendance at the conference is by invitation only. The planning committee has selected the participants for each of the working groups that are presently investigating the literature in preparation for the summit discussion.

Conclusions from this important meeting will be presented at the AO Annual Meeting in San Francisco, CA, in 2015. They will later be published in the International Journal of Oral and Maxillofacial Implants (IJOIM).

First showings of AO Founders Video
Scheduled during Seattle Annual Meeting

The Academy’s Founders Video documentary, “The Founding History of the Academy of Osseointegration,” will be shown at various times and places throughout the Annual Meeting in Seattle. A full 20-minute version and abbreviated 1-2 minute versions will be shown.

“The Board desired to record the history of the founding of the Academy while those who were involved were able to be interviewed and explain how and why the Academy came into being,” says Dr. Alan S. Pollack, New York, NY, who is leading the Founders Video Task Force, with Drs. Russell D. Nishimura, Westlake Village, CA, and Michael R. Norton, London, England. Dr. Norton serves as narrator of the video.

“We also wanted to trace the evolution and growth of the Academy since its early days,” Dr. Pollack says. In 2008, A History of the Academy of Osseointegration, 1985-2007 was published. The Founders Video will add an oral history. It is based on interviews recorded in two daylong sessions over the course of a year and a half.

“A lot of time and effort has gone into this video, and we hope that everyone will take the time to view it during the course of the Annual Meeting in Seattle,” Dr. Pollack says. “Of course, the full interviews with the Academy’s founders will also be available on the Academy website (www.osseo.org) for those interested in learning more about the heady days when Professor Brånemark first introduced his revolutionary new concept and systems,” he adds.

Dr. Pollack says the video will have many uses. “It will also be a most appropriate addition to the New Member Breakfast held at each Annual Meeting. “We will use the video in our public relations and post it on the Academy’s Website, serving as the Academy’s living archives. We expect the video will also be useful for dental implant study clubs, dental schools, resident instruction, and resident recruitment programs,” Dr. Pollack explains.
Dr. Franck Renouard  ...continued from page 9

the next question we have to ask ourselves is: Will this extra 0.5 mm in bone level during the first 6 months following the procedure reduce the risk of peri-implantitis? The reply is probably negative. A 0.5 mm bone level is not the be-all and end-all when it comes to the pathogenesis of peri-implantitis. This is a very complex condition about which we have a great deal still to learn.

Will an extra 0.5 mm in bone level make a difference to the esthetics of the final result? We’re convinced that it won’t. We don’t believe that ‘bone sets the tone’ as far as the esthetics of the implant are concerned. In any case, not when we’re talking about a matter of one millimeter or even less.

Lastly, observations made in our dental practice would lead us to estimate that over the long-term, in almost 30% of the implants that we look at (standard external hex cylinder implants) we can see bone that is level with the implant-abutment junction. In fact, the bone level can even be above the implant-abutment junction. Unfortunately, we still haven’t worked out how this happens.

So, to sum up, we would say that we’re on a hiding to nowhere if we think we can solve or understand a biological issue (i.e., peri-implant bone levels) by adopting a purely mechanical approach, that is, platform switching.

**Question: How much of bone loss around implants do you attribute to patient individuality, and how much to brand design specifics? Do you find particular brands more problematic than others and, if so, do you care to relate those?**

This question links up with the previous one. We are convinced that tissue response to implants is inextricably connected to the patient’s individual biological make-up. But to what extent exactly? As yet, it’s not possible to say. However, we have seen so many situations where multiple errors and risk factors came into play—implants placed too close to teeth, misfit at the implant-prosthesis interface, patient not taking sufficient care of their oral hygiene, etc.—without the slightest negative impact being noted. Conversely, other patients received the very best medical care yet still developed peri-implant diseases.

We’re beginning to identify general factors that could play a contributory part in the development of these diseases. For instance, patients affected by allergies and patients with low vitamin D levels are more susceptible to infections. These are potentially very interesting avenues of research.

**Question: Is there a set percentage of bone loss with inflammation, even though the implant may be stable, where you decide it is better to remove the implant and place another?**

First of all, whether the implant is stable or not is irrelevant when it comes to making the decision to keep or to remove the implant—apart from the rare cases where there is simply no solution to the situation. For example, there may have been so much bone lost that it would be impossible to place another implant following removal of the existing implant. In this case, it would be best to put off the implant’s removal for as long as possible and simply try to look after the implant as best you can. If, despite one or even two surgical interventions, the condition in question is getting worse, then the implant will have to be removed. This is when you have to pluck up the courage to tackle this challenge, not to mention face the patient (!). Sticking your head in the sand in an effort to put off the evil hour by performing subgingival irrigation or applying other ‘band-aid’ solutions will only make the situation even more difficult or even impossible when the time comes to remove the implant.

**Question: Do you feel keratinized tissue is an important factor in peri-implantitis and, if so, do you add it and when?**

The word ‘stable’ would need to be added to this question. Seemingly the presence of stable keratinized tissue is an excellent barricade to the development of peri-implantitis, although in the course of our work we have also come across a fair number of examples that would appear to refute this hypothesis.

However, we have to recognize that it’s not always easy either to convince patients to go through with this kind of procedure or to actually perform it (for example, when you have to work with severe posterior mandibular residual ridge resorption).

In the light of these difficulties, it’s important to make sure you conserve as much keratinized tissue as possible during the tooth extraction and gingival incision stages prior to the placement of implants.

**Question: For what percentage of the implants you place do you participate in the maintenance at least once a year?**

As stated at the outset, given that the profession of ‘dental hygienist’ is not recognized in France, I think that fewer than 10% of patients we look at have their teeth professionally cleaned on a regular basis. We try to concentrate our efforts on the most pressing cases.

**Bonus Question! Would you care to share any observation, technique, advice, or other information our members might find helpful for treating mukoitis and peri-implantitis?**

Nowadays, treating mucositis isn’t particularly problematic as long as the etiological factors are identifiable and treatable. However, treating peri-implantitis remains extremely challenging and the long-term success rate for treatment is low. Prevention remains the best cure for these two conditions. It has to be said that a contributory factor in the occurrence of peri-implant inflammation or infection is the incorrect positioning of implants. The same can be said of crown emergence profiles that make it difficult for the patient to look after their restoration properly.

...continued on page 13
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Academy News welcomes 4 new editors

The Academy News Committee is proud to add four new members to its ranks of contributors. You will see their names and faces in upcoming issues of the News, and we welcome them on the News team.

First is Dr. Harriet K. McGraw, a general practice dentist in Harbor Springs, Michigan. A graduate of the University of Michigan, she finds that advanced continuing education has been a key factor in her approach to complex restorative treatment. She is a founding member of the Northern Dental Network, an interdisciplinary study club, and serves on her local dental society board currently as Past President as well as the Michigan State committee on peer review. She and her husband, Vaughn, a periodontist and also an AO member, share a passion for the great outdoors and travel whenever time permits.

Dr. Navid Rahmani, periodontist, moved to the United States at the age of eight years old and attended undergraduate college at NYU, then matriculated from dental school at Stony Brook. He credits AO Past President Dr. Vincent J. Iacono, Stony Brook, NY, for his interest in periodontics and implant surgery. He practices in New York City and teaches at New York Hospital of Queens, working with the Prosthodontic Resident Program. He was recently married and is now the proud father of a baby boy. He states, “I enjoy every day waking up and coming to work to treat my patients and going home to my beautiful family.”

Dr. Archie A. Jones, periodontist, hails from Boerne, Texas, just outside San Antonio, where he practices. He is a fulltime faculty member and Director of Predoctoral Periodontics at the University of Texas Health Science Center at San Antonio. He is married to Elizabeth and enjoys photography, travel, and music. A member of the Academy of Osseointegration since 2005, he has been active on the Membership Committee for several years. As an educator, his contributions from an academic perspective will be most welcome.

Dr. Robert L. Schneider, Iowa City, IA, is the Director of Maxillofacial Prosthodontics at the University of Iowa Hospitals and Clinics, Hospital Dentistry Institute. He received his DDS degree from the University of Southern California and spent five years in general practice in Arizona before earning his MS and certificate in prosthodontics from The University of Iowa. He has published extensively in the prosthodontic literature and is very active in many prosthodontic and dental laboratory organizations. In fact, he is one of only three individuals who have received an Honorary CDT from the National Association of Dental Laboratories for his many contributions to the dental technology field. We are privileged to have Dr. Schneider on the Academy News team.

It is a pleasure to introduce these new contributors to your quarterly issues of the Academy News. They join returning members Drs. Edward M. Amet, Overland Park, KS (prosthodontist), Louis R. Guenin, London, England (general practice), Paige Warren Miller, New Bern, NC (general practice), and Bruce K. Barr, Virginia Beach, VA (periodontist) in producing the content that you enjoy in each issue. Welcome!

Dr. Franck Renouard …continued from page 11

Correct three dimensional positioning of the implant is the key factor in the prevention of peri-implantitis (and indeed of other complications, whether biomechanical or esthetic in nature). This would seem to be obvious, but like everything that is seemingly obvious, it’s a fact that we do well to remind ourselves of from time to time.

It’s also important to ensure that there is a minimum of 2 mm bone thickness around the implant. In the past, as a consequence of wanting to follow our surgical guides to the letter, some implants were placed without leaving enough bone on the vestibular side. In some cases, we have seen an inflammation gradually develop in tandem with bone loss, firstly horizontal bone loss, then vertical bone loss.

Nowadays we would have no hesitation in adopting a ‘preventive’ approach, using biocompatible materials to augment the alveolar ridge and employing small-diameter dental implants which enable us to preserve a little more of the bone around the implant.

Update member contact info at www.osseo.org

Do we have your most current information for the Membership Directory? Members may update their contact information online at www.osseo.org, or send an email to Barbara Hartmann, barbarahartmann@osseo.org.
Here’s to longer telomeres, and exploring the mysteries of life

By Kevin T. McNally, DDS, Newsletter Editor

I know you were as happy as I was to hear that we can now influence the length of our telomeres. You know, those little bits of protein that sit on the ends of our chromosomes. I am sure you remember from Genetics 101 that these small caps of protein prevent our chromosomes from fraying and sticking to one another that would otherwise bugger up the cell’s function and make it behave badly. You may also remember that each time a cell divides, the telomeres get shorter, ultimately leading to cell malfunction and death.

Aside from the obvious maladies of humanity – cardiovascular disease, cancer, diabetes, etc. – longer telomeres appear to mean living longer, and healthier. As you might imagine, a study has been done to suggest that people can lengthen their telomeres, and this has begotten a number of companies who, for a fee, will give you the 411 on your telomeres. Fortunately, the way to promote longer telomeres is not all that difficult. Comically, the method is so last week as to be relegated to the back pages of the health and living section of your local blade: exercise regularly, eat right, lose extra weight, and reduce stress. Duh!

Perhaps the benefit to this is to confirm our longstanding belief that living a healthy lifestyle leverages our longevity. However, since some of our patients do not subscribe to this philosophy, we are faced with treating people in various stages of decline and death, to put it bluntly. This is not a bad thing, since it is how many of us make a living. Personal interest aside, there is a noble undertaking in the healing of the sick, biblical almost. Indeed, it is this desire to heal and repair the ravages of life that makes all of us in health care as dedicated as we are.

The good news is that all of our efforts to help heal our patients have a bright future. Research, such as that mentioned above, continues to delve deeper into our understanding of life and its processes. Aside from the obvious financial incentives to discover and develop new treatment modalities, there seems to be an instinct in many of us to venture into the unknown, as Captain Kirk of the Starship Enterprise is famous for saying, “To go where no man has gone before!”

Back down on Earth, we implant dentists are faced with the challenge of treating those patients mentioned above who do not subscribe to the longer telomere theory. It is an unstated suggestion that everybody should sooner or later get a dental implant. Think of those untold millions of edentulous spaces around the world just waiting for the Starship Dentalprise to put implants where no implants have been before! But is this what really drives us? Is it merely the mechanics of repair and rehabilitation that keeps us in the maelstrom of health care?

I would like to think that it is more likely a bit of that childlike wonder we share of the sheer complexity and magnificence of the world around us. The solving of a puzzle, the thought of a new idea, watching a spider spin a web without any government funding or a cell phone. It is this simple love of the mysterious in our natural world that really keeps us in the game. The best part is that this passion is not merely linear with a slow advance to some point in the future. Our wonder curve is exponential, and the beauty is we will see things in our lifetime that we have yet to imagine.

No better telling of that is our collective interest in and passion for dental implantology. It is a terrific story, one that Hemingway or Steinbeck could only dream about. A humble researcher discovers, while studying one process, an entirely different and wondrous phenomenon, osseointegration! Attempts at replacing body parts (a.k.a. teeth) have been around since the Egyptians without success, and yet here little pieces of titanium seem to work like a charm! What an incredible story!

Of course, this seminal discovery has followed the likes of many throughout the ages from Aristarchus to Zsigmondy and many, many in between. You can count on many more. And isn’t it this, the promise of the new and exciting discoveries that we by virtue of dumb luck, hard work and a few well-placed neurons are positioned to help our fellow travelers, our patients, to make a difference for a better life.

Our Academy of Osseointegration, I believe, reflects this sentiment, maybe not in the by-laws or written committee assignments, but in the spirit of what draws its members from around the world to gather once a year and share their secret wonder about a few of the mysteries of life. It has been said that going through one door merely leads to several others on the other side of the room. Here’s to many doors to come, and of course to longer telomeres!

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 ktmcnallydds@hotmail.com. We will endeavor to publish pertinent comments or views when space permits.
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