

# IMPLANT TRIBUNE

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## AO heads to Tampa

*Group's scientific program emphasizes quality, advantage of interdisciplinary team approach*

**T**he emphasis in the scientific program for the Academy of Osseointegration's 28th Annual Meeting in Tampa, Fla., from March 7-9, will be on achieving quality and leveraging the advantage conferred by the interdisciplinary team approach.

The annual meeting program will focus on the future with the theme, "Moving Forward: Evidence, Experience, Excellence." The opening symposium on Thursday, March 7, features some of the biggest names in implant dentistry.

Leading off will be researcher/clinician Lyndon F. Cooper, DDS, PhD, Chapel Hill, N.C., on the topic, "Translating Evidence Into Treatment Predictability: What Evidence Do We Have? What Do We Need?"

Cooper is Stallings Distinguished Professor of the University of North Carolina Department of Prosthodontics and a member of the department of biochemistry and biophysics in the UNC School of Medicine. He is director of the Bone Biology and Implant Therapy Laboratory.

Cooper's presentation will examine the current status of dental implant therapy and attempt to interrogate the levels of treatment predictability that exist for these different therapies. His

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Tampa, Fla., will be the site of the Academy of Osseointegration's 28th annual meeting titled, 'Moving Forward: Evidence, Experience, Excellence.' Photo/www.sxc.hu

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# Laser polishing accelerates surface finish of implants, researchers say

By Dental Tribune International

AACHEN, Germany — Researchers have developed a flexible and cost-effective apparatus to polish implants automatically. The project team has managed to reduce the time needed to process dental and blood-carrying implants while maintaining their high bio- and haemocompatibility.

The surface quality of an implant plays a significant role if it is to be used in the body successfully. For example, bone implants require a porous structure so that cells can grow into them well. Other

implants, however, need as smooth a surface as possible to prevent bacteria from attaching to them and the surrounding tissue from being damaged.

The MediSurf project has made these kinds of implants the object of its research. The seven partners of the project, funded by the German Federal Ministry of Economics and Technology and led by the Fraunhofer Institute for Laser Technology ILT, recently presented their research results in Aachen.

The main focus was the optimization of the surface of the titanium ventricular assist system INCOR, made by Berlin

Heart. The project aimed at reducing production time while guaranteeing high haemocompatibility. This means that the implant should leave blood corpuscles undamaged, and corpuscles should be prevented from settling on the implant as far as possible. Blot clots are prevented from forming, thus significantly reducing the risk of heart attacks and strokes.

Initially, the researchers had to establish whether laser-based polishing of the surface could obtain the same level of haemocompatibility as with conven-

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**PUBLISHER & CHAIRMAN**  
Torsten Oemus [t.oemus@dental-tribune.com](mailto:t.oemus@dental-tribune.com)

**CHIEF OPERATING OFFICER**  
Eric Seid [e.seid@dental-tribune.com](mailto:e.seid@dental-tribune.com)

**GROUP EDITOR**  
Robin Goodman [r.goodman@dental-tribune.com](mailto:r.goodman@dental-tribune.com)

**MANAGING EDITOR IMPLANT TRIBUNE**  
Sierra Rendon [s.rendon@dental-tribune.com](mailto:s.rendon@dental-tribune.com)

**MANAGING EDITOR SHOW DAILIES**  
Kristine Colker [k.colker@dental-tribune.com](mailto:k.colker@dental-tribune.com)

**MANAGING EDITOR**  
Fred Michmershuizen  
[fmichmershuizen@dental-tribune.com](mailto:fmichmershuizen@dental-tribune.com)

**MANAGING EDITOR**  
Robert Selleck [r.selleck@dental-tribune.com](mailto:r.selleck@dental-tribune.com)

**PRODUCT/ACCOUNT MANAGER**  
Humberto Estrada [h.estrada@dental-tribune.com](mailto:h.estrada@dental-tribune.com)

**PRODUCT/ACCOUNT MANAGER**  
Charles Serra [c.serra@dental-tribune.com](mailto:c.serra@dental-tribune.com)

**MARKETING DIRECTOR**  
Anna Wlodarczyk-Kataoka  
[a.wlodarczyk@dental-tribune.com](mailto:a.wlodarczyk@dental-tribune.com)

**C.E. DIRECTOR**  
Christiane Ferret [c.ferret@dtstudyclub.com](mailto:c.ferret@dtstudyclub.com)

Tribune America, LLC  
116 West 23rd Street, Suite 500  
New York, NY 10011  
Phone (212) 244-7181  
Fax (212) 244-7185

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Clark M. Stanford will speak during the opening symposium at the AO annual meeting in Tampa. Photo/Provided by the University of Iowa, College of Dentistry

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current clinical interests focus on the development of cell based tissue engineering for clinical bone formation and the immediate loading of dental implants.

Other opening symposium topics and speakers are:

- “Practical and Predictable Surgical Approaches in the Esthetic Zone: Multiple Challenges,” by Daniel Buser, DDS, DMD, of Bern, Switzerland. Buser will present surgical approaches in the esthetic zone developed at the University of Bern, which offer successful outcomes with high predictability.

- “The Dental Implant: What Are the ‘Right’ Implants for Today’s Indications? Surfaces, Connections, and Flexibility,” by Clark M. Stanford, DDS, PhD, of Iowa City, Iowa. His presentation will show how the predictability of the process of

tooth replacement with dental implants is becoming enhanced through the applications of new technologies expanding on our long-established protocols for implant therapy.

- “Implant Dentistry: The Interdisciplinary Advantage,” by Richard D. Roblee, DDS, MS, orthodontist from Fayetteville, Ark; Edward P. Allen, DDS, PhD, periodontist from Dallas; and Robert R. Winter, DDS, prosthodontist from Scottsdale, Ariz. Their presentation will focus on utilizing an interdisciplinary approach to maximize comprehensive results in implant dentistry.

The program retains many very popular features, beginning with the Corporate Forums Thursday morning. This year’s participants are BioHorizons, BIOMET 3i, DENTSPLY Implants, Geistlich Biomaterials, Hiossen, Millennium Dental Technologies, MIS, Nobel Biocare, Os-

teogenics, Osteohealth, Straumann USA and Zimmer Dental.

Poster presentations will be introduced Thursday afternoon, just before the welcome reception held in the exhibit area. The popular, intimate round-table clinics and limited-attendance lectures with leading experts will be Friday morning. Oral abstract research presentations will be also be presented Friday morning, and clinical innovations presentations will be Friday afternoon, preceding the president’s reception to be held at the Florida Aquarium.

The Allied Staff Program and the Laboratory Technician Program will be held Saturday. The popular “Lunch & Learn Sessions” return Saturday at noon.

Saturday’s Closing Symposium addresses the topic, “Where Are We Today and What Does the Future Hold?” Speakers will address esthetic parameters of tooth replacement, the role of team in implant dentistry, peri-implant tissue management and the evolving role of radiology in improving predictability.

More speakers and topics include:

- Urs C. Belser, DMD, of the University of Geneva, Geneva, Switzerland, “Contemporary Implant-Assisted Options for Patients with High Esthetic Demands: Where Are We Today and Where Will We Be Tomorrow?” Belser will discuss the rationale for an early placement/early loading concept for replacement of extracted teeth.

- David A. Garber, DMD, Henry Salama, DMD, and Maurice A. Salama, DMD, of Atlanta, on “What Was, What Is and What Will Be: The Evolving Role of Team in Implant Dentistry.” Their discussion will focus on a defined algorithm for the interdisciplinary team and will cover the diagnosis of deficiencies and the varied treatment options in detail.

- Joseph Y.K. Kan, DDS, MS, of Loma Linda, Calif., on “Peri-Implant Tissues in the Esthetic Zone: What Do We Really Know and What Can We Realistically Achieve?” Focusing on current implant treatment philosophies and methodologies, Kan will cover diagnosis and treatment planning, surgical, prosthetic management of soft and hard tissue for optimal anterior implant esthetics.

- William C. Scarfe, DDS, BDS, MS, of Louisville, Ky., on “The Evolving Role of Radiology in Improving Treatment Predictability in Implant Therapy.” Scarfe’s presentation will provide a closer look at how CBCT imaging will provide the 3-D framework for implant therapy totally within the digital domain, thereby improving treatment predictability.

Friday morning’s program features the highly successful parallel surgical and restorative tracks, annual meeting organizers said. Speakers will include Drs. Craig Misch, Sarasota, Fla.; Robert Marx, Miami; Paul Fugazzotto, Milton, Mass.; Eduardo Lorenzana, San Antonio, Texas; Dennis Shanelec, Santa Barbara, Calif.; Hideaki Katsuyama, Yokohama, Japan; Thomas Wilson, Dallas; Brody Hildebrand, Dallas; Ronald Jung, Zurich, Switzerland; Hans-Peter Weber, Boston; Stephen Parel, Dallas; German Gallucci, Boston; Mario Rocuzzo, Torino, Italy; and J. Robert Kelly, Farmington, Conn.

The program was created by the 2013 Annual Meeting Committee, chaired by Dr. Dean Morton, Louisville, Ky.

(Source: Academy of Osseointegration)

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# AO's Allied Staff Education Program: The patient experience

By Anita H. Daniels, RDH

From the moment a new patient walks into the practice, members of the dental office staff play an indispensable role in learning about the past dental histories of patients and what kind of smile that person would like to have. They have an opportunity to educate patients about options for treating missing or hopeless teeth and/or replacing ill-fitting removable prostheses.

The patient experience starts with the

receptionist (the face of the practice at this point), who can make patients comfortable with the knowledge that they are in the right place and will be taken care of. Receptionists must have the skill sets to graciously pass the patients off to the assistants and/or implant treatment coordinator. This transfer must be done professionally and with great care, such that patients continue to feel that they are in the right place.

Assistants generally walk the patient through the exam process and should

educate the patients as to what they can expect: medical and dental histories, digital radiographs, complete physical examination, assessment, diagnosis and treatment plan options.

Treatment coordinators, depending on the particular practice, will then be called upon to explain the diagnoses and describe the benefits and limitations of the treatment plan options. Dental hygienists, who develop trust and rapport with their patients over time, can further support this process by educating them

about the options that are now available.

An extraordinary opportunity for staff members to enhance their skills will unfold Saturday, March 9, at the dedicated Allied Staff Education Program that is a part of this year's 28th AO Annual Meeting in Tampa, Fla. The program is intended for implant treatment coordinators, dental hygienists, assistants and business office staff/receptionists.

The day will start with Dr. Carl Drago's overview of comprehensive care needs of "dentally exhausted" patients. Although many dental practitioners have spent their careers "saving" debilitated teeth, when ongoing expensive and time-consuming dental care continues to yield less than optimal results, patients may fare better by having their compromised teeth extracted, followed by immediate placement of implants and full-arch restorations. This approach represents a significant paradigm shift from "traditional" dentistry. Drago, of Waukesha, Wis., will discuss how office and clinical staff can interact with and support patients in their decisions regarding full-arch implant-supported restorations.

A significant number of patients do not warrant full-arch treatment and have one or two problem teeth or areas. Accelerated treatment protocols have been well researched and clinically proven. However, not every patient is a candidate for immediate implant placement and provisional restoration in the esthetic zone.

Dr. Joseph R. Carpentieri of White Plains, N.Y., will discuss the delicate balance that must be struck between using accelerated implant-placement protocols and achieving predictable esthetic outcomes. In particular, he will focus on criteria for distinguishing which patients are good candidates for implant placement and provisional restoration immediately after extraction of anterior maxillary teeth.

After an audience-participatory discussion and a break for lunch, Dr. Robert N. Eskow of Livingston, N.J., will continue the focus on the role played by staff members in identifying potential candidates for elective implant therapy. He also will explain some of the pre-treatment therapeutic measures that can be administered to enhance the likelihood of achieving optimal results.

Before, during and after implant treatment, effective preventive care is essential to sustaining esthetic restorations, teeth and implants over time. Registered Dental Hygienist Valerie Sternberg-Smith of Summit, N.J., will be discussing the causes of peri-implantitis and how to recognize the early signs. She also will explain how to determine the best plaque-control aids for various esthetic restorative/prosthetic designs.

## About the author

Anita H. Daniels of Jupiter, Fla., chairs the AO's Allied Professional Staff Education Subcommittee. She is a registered dental hygienist.

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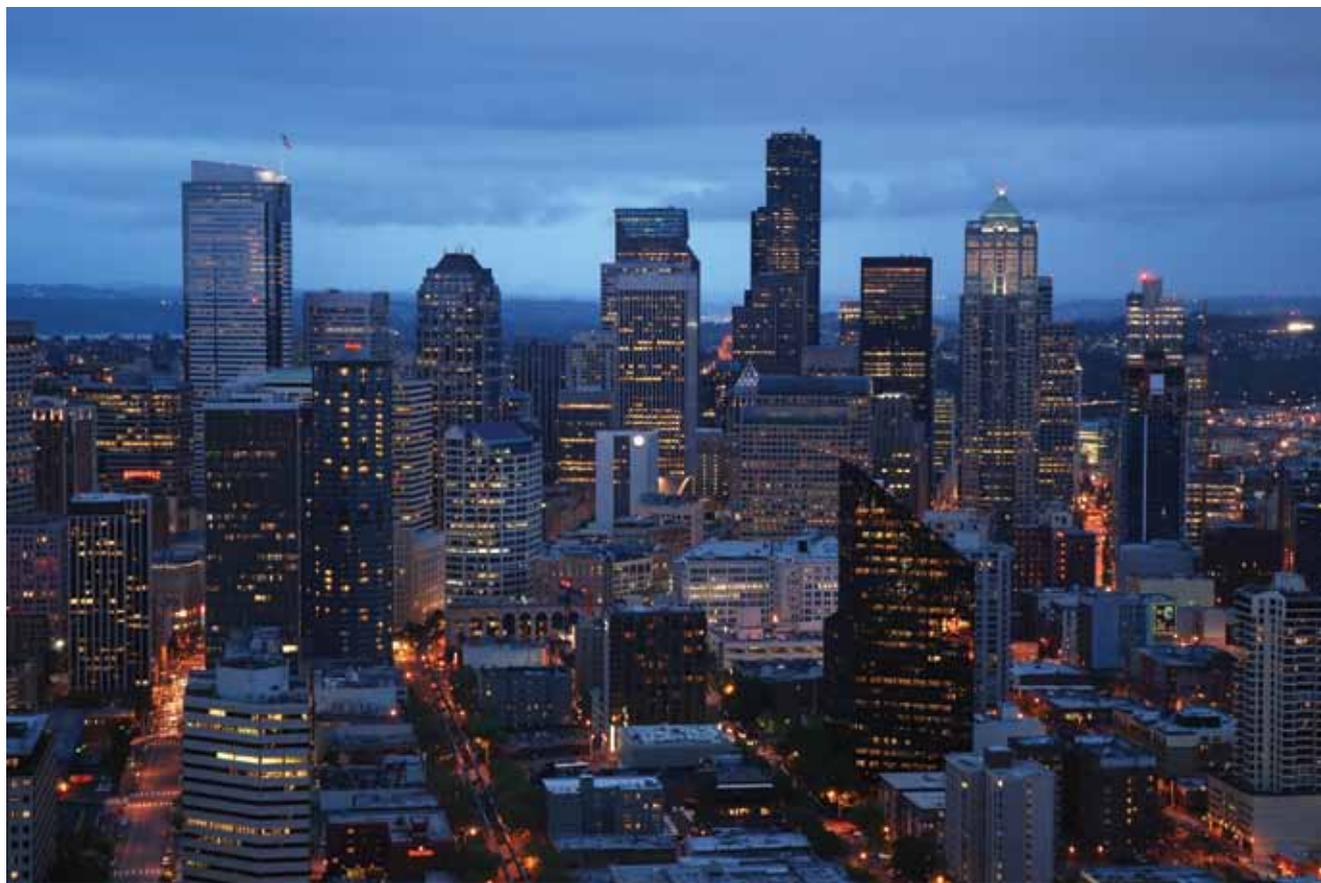
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# AACD lineup revealed



AACD 2013 will take place in Seattle. Photo/www.sxc.hu

## Garber, Salama among the list of speakers at upcoming meeting

**C**ourses and educators for AACD 2013 have now been revealed, including Drs. David Garber, Maurice Salama and many others among the lineup.

AACD 2013, the American Academy of Cosmetic Dentistry's (AACD) annual scientific session, is slated for April 24–27 in Seattle. Attendees who register before April 5 will receive \$150 off their tuition. To register, visit [www.aacdconference.com](http://www.aacdconference.com).

What sets the AACD's meeting apart from other dental meetings is the live

learning experience, AACD President Ron Goodlin said.

"Our courses are geared toward all members of the dental team — from dentists to lab techs, hygienists, team members, office staff and more," Goodlin said. "AACD 2013 is a place where dentists and teams can evolve together. They'll return to their practices the following Monday with a new set of skills, new techniques and new energy."

To see who's on this year's lineup, check out the AACD's digital version of the preliminary conference guide, available at [bluetoad.com/publication/?i=85943](http://bluetoad.com/publication/?i=85943).

The digital conference guide lists courses, speaker bios, exhibitor lists, schedules of events and information about social events, including receptions and fund-

## To register

For more information or to register, visit [www.aacdconference.com](http://www.aacdconference.com).

raising activities for the AACD Charitable Foundation.

The conference kicks off at 2:30 p.m. April 24 with a "power session" featuring Drs. Garber and Salama. Following the power session is the AACD's welcome reception, which will be held at the Experience Music Project, located at the base of Seattle's famous Space Needle.

Attendees are encouraged to register for the conference as soon as possible and to view the courses in the preliminary guide prior to course selection opening. For more information or to register, visit [www.aacdconference.com](http://www.aacdconference.com).



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## To register

For more information or to register, visit [www.pdconf.com](http://www.pdconf.com).

## <LASER, Page 2

tional manual polishing.

In order to answer this, the team at the Fraunhofer ILT developed a process to polish blood-carrying implants with lasers. "We are able to reduce the micro-roughness to such an extent that the implant exhibits the best possible haemocompatibility. However, we began with very little information on exactly what quality the surface had to have for this purpose," explained project leader and engineer Christian Nüsser from the

Fraunhofer ILT. "For this reason, we had to test various parameters to reach the desired result."

The haemocompatibility of the implants was tested at the Münster University Hospital. The result: laser-polished implants exhibit the same haemocompatibility as those polished manually, but laser polishing is 30 to 40 times faster than manual polishing. With large lot sizes, this means an enormous reduction in production costs. In addition, laser polishing has a higher reproducibility. It guarantees a homogeneous smoothness

over the entire surface of a free-form geometrical component, even on corners and edges, which are difficult to reach when polished manually.

Unlike in conventional processes, the edges are not rounded off when polished with lasers, thus guaranteeing high geometrical accuracy of the component. Another advantage of laser polishing lies in its far cleaner and more environmentally friendly process. In contrast to manual polishing, no polishing or abrasive materials are used, leaving no chemical residue on the implant.

Alongside this polishing process, a prototype apparatus has been developed at the Fraunhofer ILT for automated laser polishing of implants. For the first time, scientists have developed a glove box with a six-axis articulated robot, which can grasp the implants and process a complete series of them on its own. This automated machine engineering makes the entire process less expensive, more flexible and appropriate for industrial series production.



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