

ISSUE 1 / 2014



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dental practice news

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# DPN Study Club

As part of our Training & Education services for dental professionals, Dental Practice News (DPN) will organize seminars, workshops and courses for continuing dental education in the region.

Among the key countries where the training programs will be conducted are in Singapore, Malaysia, Indonesia and Philippines.

The dental training programs and courses include Esthetic & Restorative Dentistry, Implant Dentistry, CAD/CAM-Digital Dentistry and Practice Management.

Participants will learn from experienced multi-disciplinary team of specialists involved in conducting such training programs and courses.

Take the Implant Dentistry course, for example. A prosthodontist, a periodontist and an oral surgeon make up the team for the Implant Dentistry course.

Training under a team of specialists will allow participants to learn the unique strengths of each specialty.

A prosthodontist can teach many aspect of restoring implant prosthesis; a periodontist can impart the skills in management of soft tissue around implants; and an oral surgeon can discuss techniques of bone grafting in great detail.

For the Implant Dentistry training program, the course aims to train participants in the basic surgical and prosthodontic skills of implant dentistry. In addition, the course emphasizes strongly on the advanced surgical and prosthodontic skills required for esthetic implant restorations.

The upcoming dental training programs and courses will be updated regularly on our Facebook page: The Leading Dentist ([www.facebook.com/TheLeadingDentist](http://www.facebook.com/TheLeadingDentist)).

To join our DPN Study Club and receive updates on dental seminars and courses, please email to: [dentalnetworkasia@gmail.com](mailto:dentalnetworkasia@gmail.com)

**For more info, visit our website: <http://dentalnetwork.sharepoint.com>**





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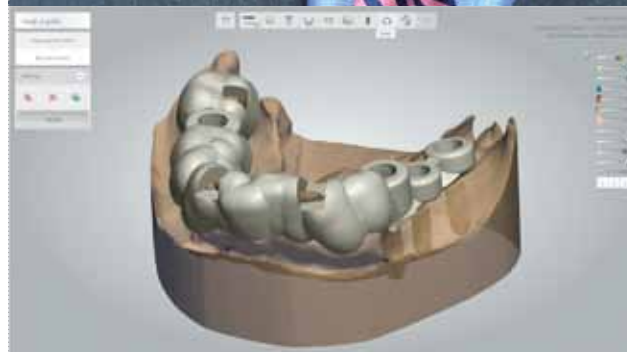
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## MISSION

**DPN** is committed to fostering better communication among dental professionals and providing a vital link between the dental profession and industry in Asia.

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#### Printed in Singapore by

A&D Printhead Pte Ltd

ISSN: 1793-7701

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Cover photo: Courtesy of 3Shape

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# ESTHETIC RESTORATIONS VIA MINIMALLY INVASIVE APPROACH



**AUTHORS:**  
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LONDRINA, AND  
MARCOS CELESTRINO,  
SAO PAULO/BRAZIL

MINIMALLY INVASIVE REMOVAL OF HEALTHY TOOTH STRUCTURE PLAYS A CENTRAL ROLE IN ESTHETICALLY MOTIVATED TREATMENTS. SEVERAL OTHER FACTORS SHOULD ALSO BE CONSIDERED IN THE SELECTION OF AN APPROPRIATE TREATMENT OPTION.



Minimal restorations have become well established in esthetic restorative dentistry. The clinical application possibilities enable users to select from a vast array of treatment options.

The indication at hand should be carefully assessed to achieve a restoration that optimally meets the given esthetic and functional requirements. Minimally invasive and in some cases even preparation-free restorations have become feasible due to the advances in adhesive techniques and the restorative materials.

## Patient case – Initial situation

A 31-year-old male patient requested an esthetic improvement of the anterior region (Fig. 1). A clinical examination showed the following situation: large anterior diastema; intact teeth 13, 12, 21, 22 and 23; small restoration (class IV cavity) on tooth 11; wear, possibly induced by bruxism, on teeth 11, 12 and 22; an even occlusion in the posterior region and a healthy periodontium. The general medical history of the patient did not reveal any indications hinting at symptoms or complaints related to the occlusion or temporomandibular dysfunction (TMD).

## Treatment options

A few years ago, a metal ceramic restoration would have been the treatment of choice in a case like this. However, this option is frequently rejected nowadays, because it involves the removal of a large amount of healthy tooth structure and numerous treatment steps – an approach that many dentists would now regard as outdated for the present case.

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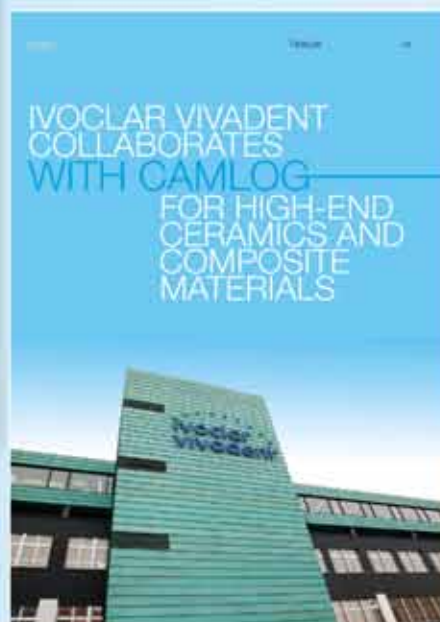
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# DPN-Trisakti University

# MOU

Since its inception in 2005, Dental Practice News (DPN) magazine has documented some key milestones in the dental industry in the region. One of the most significant milestones, thus far, is the MOU (memorandum of understanding) signing with Trisakti University, Indonesia.

The MOU between DPN magazine and the Faculty of Dentistry, Trisakti University is to collaborate on dental publications and continuing education programs for dental professionals in Indonesia.

Trisakti University was established in the capital city of Jakarta in 1965. The university's Faculty of Dentistry is a leading dental institution in Indonesia with over 5,000-strong network of member dentists.

DPN has been building a regional network with the dental profession in Indonesia for many years now. The MOU signing is perhaps the culmination of such strong network and cooperation between DPN and the dental profession in Indonesia.

We believe that Indonesia will remain a key regional market for the dental healthcare industry for many years to come. And with the leadership of a strong dental faculty network such as the Faculty of Dentistry, Trisakti University, we remain positive that the dental healthcare profession and industry will continue to develop in Indonesia.

We sincerely thank the Faculty of Dentistry, Trisakti University for their continued support and faith in our international dental publication. And with the official MOU already in place, we certainly look forward to even closer cooperation in the future between DPN and Trisakti University.– **DPN**



# Spotlight on Infection Control and Alternatives to Antibiotics

Recent reports from major organizations such as the World Health Organisation (WHO), the US Center for Disease Control (CDC), the European Centre for Disease Prevention and Control (ECDC) and the Alliance for the Prudent Use of Antibiotics (APUA) have highlighted the growing global problem of antimicrobial resistance.

Thus, it is timely for IDEM Singapore 2014 to address the subject of infection control and alternatives to antibiotics as part of its scientific program. These topics will be covered in lectures by Dr John Molinari and Prof Ken Hargreaves.

For years Dr Molinari, a microbiologist, has been lecturing doctors and dentists about the risk of antimicrobial resistance – a growing public health concern around the world.

He believes that there are numerous issues involving misperception and the misuse of infection control procedures in all areas of healthcare that are in conflict with the latest scientific and clinical knowledge.


According to Prof Hargreaves, nearly two million people have infections with antibiotic resistant bacteria every year in the US and 23,000 of these individuals die from their infections. "It has been estimated that up to 50 per cent of antibiotic prescriptions are made for patients who do not have a medical indication for these drugs. These facts require a re-evaluation of the use of antibiotics in odontogenic infections," says Prof Hargreaves.

Prof Hargreaves notes that there's growing recognition of the impact of antibiotic resistance as a health threat. "In 2013, the US Center for Disease Control published an extensive review entitled, 'Antibiotic Resistance Threats in the United States'. This report, together with the 2013 Eurobarometer survey report, provide compelling evidence for the prudent clinician to understand this issue and to provide appropriate treatment for odontogenic infections." – **DPN**



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# 3Shape

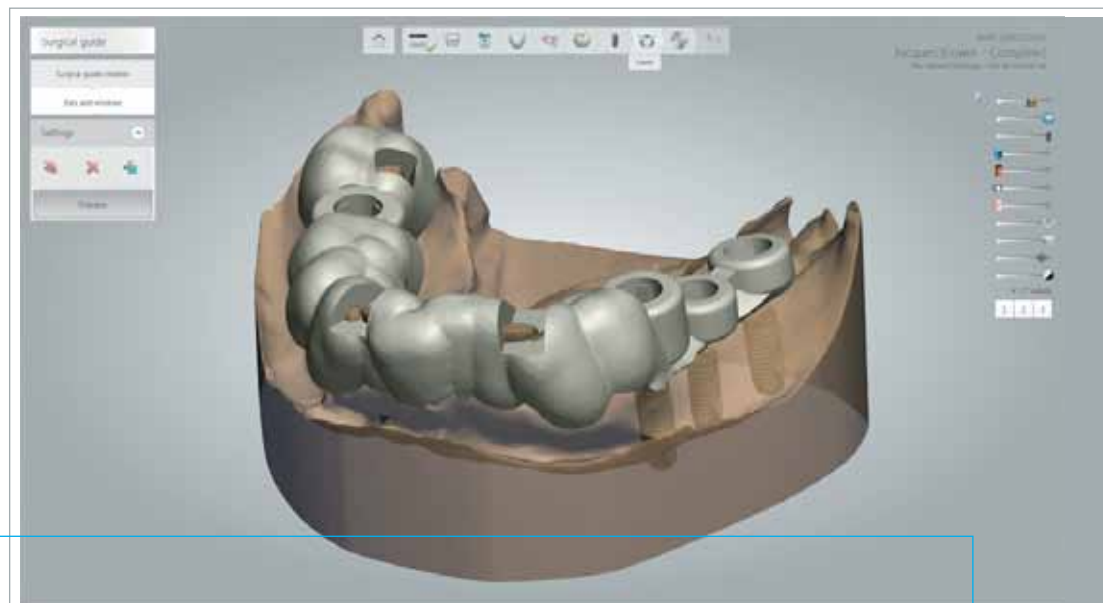
## LAUNCHES DENTAL SYSTEM 2014

3SHAPE'S DENTAL SYSTEM 2014 INTRODUCES NEW DENTAL INDICATIONS, A NEW USER INTERFACE, AND OPTIMIZED WORKFLOWS FOR TRIOS DIGITAL IMPRESSIONS. ADDITIONAL ENHANCEMENTS INCLUDE MORE AUTOMATION, FASTER DESIGN WORKFLOWS, POWERFUL CAD VALIDATION TOOLS AND TIGHTER INTEGRATION WITH CAM SOFTWARE.

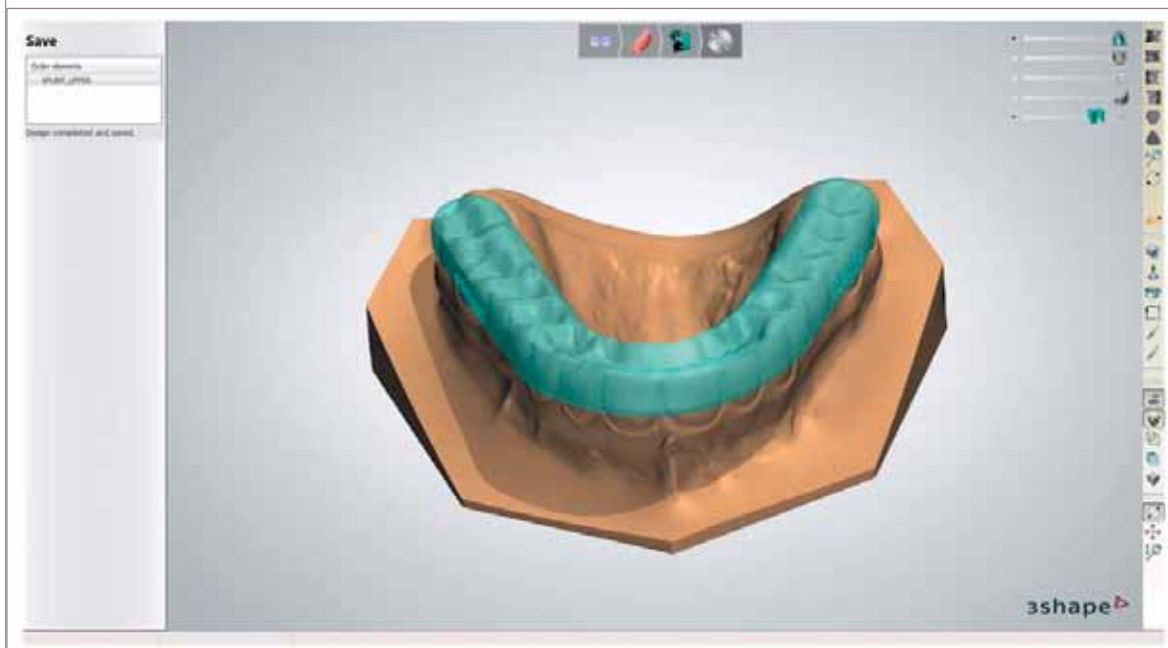


3Shape, the user-acclaimed leading innovation company for 3D scanners and CAD/CAM software solutions, has released its next generation Dental System 2014 to the market.

"Dental System 2014 is the result of our commitment to provide new digital solutions that significantly increase the levels of productivity and range of services that labs can offer," says Flemming Thorup, president & CEO of 3Shape. "With this 2014 release, we have focused strongly on optimizing the design workflows and improving usability for users of all levels."







#### Among the new features in Dental System 2014 include:

- Auto-crown functionality for increasing productivity  
The software automatically positions and shapes designed crowns to fit neighboring teeth and antagonist.
- New powerful user experience  
Optimized workflows and a redesigned user-interface include 3D order forms, a new Workflow Bar, intuitive sub-design steps, plus flexible “Next” and “ Preview” buttons. Users can choose between “Basic” and “Expert” design modes to adjust the complexity of workflows according to needs, software skills and experience.
- Easily determine the margin line using TRIOS HD photos  
View highly detailed images in key areas captured by the new HD photo feature in the TRIOS Digital Impression solution.
- New Splint Designer module provides new service options  
Software for CAD design of common dental appliances, such as Splints, Night Guards, and Protectors, ready for output using 3D manufacturing machines and materials. 3Shape is offering this attractive module to Dental System Premium subscribers for free.
- Implant Studio for implant planning and surgical guides  
All-in-one software package – Implant planning, prosthetics, and design of surgical guides ready for cost-efficient manufacturing. Implant Studio will be available both as an add-on module for integrating in Dental System and also in various stand-alone configurations.
- Other new features and updates  
Dental System 2014 additionally includes optimized workflows for digital impressions, enhanced scanning speed and accuracy, framework design with mamelon structures, and more. The complete list of new features is available at [www.3shapedental.com/2014](http://www.3shapedental.com/2014)

#### Upgrading to Dental System 2014 is a part of 3Shape LABcare

3Shape includes LABcare with all Dental System subscriptions. LABcare is 3Shape's customer-centric business model that ensures users continuously get new technologies through annual software releases such as Dental System 2014. In addition to upgrades, LABCare gives subscribers access to 3Shape's support network, as well as to training channels such as webinars, videos, etc.

Dental System 2014 will be available through 3Shape resellers. Availability to end-users is dependent on the specific system configuration.

**For more info, contact your local 3Shape supplier, or visit [www.3shapedental.com](http://www.3shapedental.com).**



# IPS e.max

## CLINICAL GUIDE

Ivoclar Vivadent has revised and complemented its IPS e.max Clinical Guide, which provides clear instructions for the optimal processing of IPS e.max materials in the dental practice.

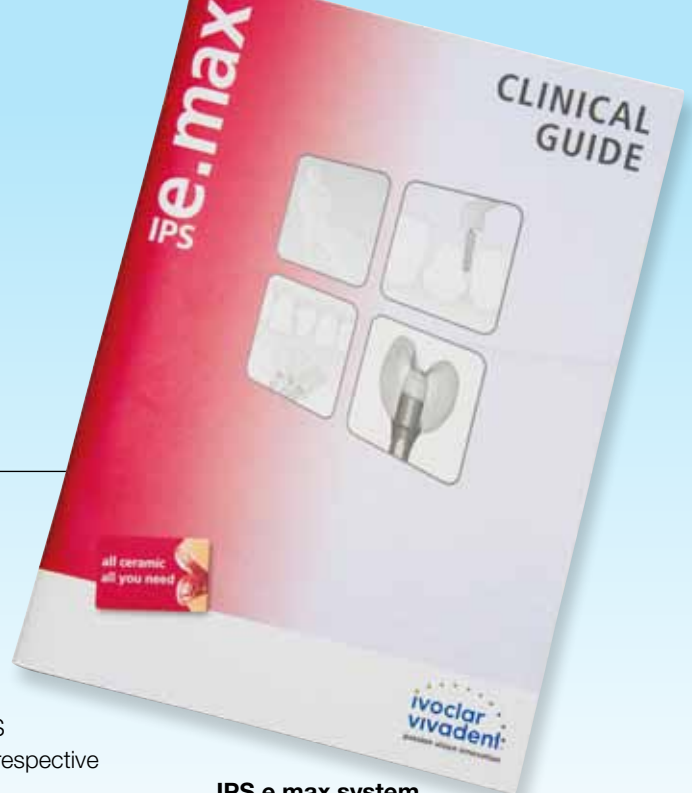
The comprehensive IPS e.max Clinical Guide from Ivoclar Vivadent features 40 pages of introductory explanations about the IPS e.max system as well as an overview of the system's indications and respective cementation options.

The practical steps of fabricating restorations using IPS e.max are presented in short and clearly structured chapters, including the shade selection of the tooth and prepared tooth structure, the preparation in line with the respective indication and the final placement.

Special focus is placed on the cementation procedure. In a detailed photo series, eight clinical cases demonstrate step-by-step how to correctly prepare and place IPS e.max restorations, ranging from veneers to multi-unit bridges.

The final chapter is dedicated to the aftercare of restorations. Additionally, information on the clinical reliability of IPS e.max materials is presented at the end of the clinical guide.

The IPS e.max Clinical Guide can be downloaded in English from [www.ivoclarvivadent.com/clinicalguide-en](http://www.ivoclarvivadent.com/clinicalguide-en).



### IPS e.max system

IPS e.max is an innovative all-ceramic system, designed for the entire range of all-ceramic restorations: from thin veneers to long-span bridges. IPS e.max consists of highly esthetic and durable materials, which are suitable for the press and CAD/CAM technique. The system comprises lithium disilicate glass-ceramic materials for the fabrication of single-tooth restorations, hybrid abutments and small bridges as well as high-strength zirconium oxide for long-span bridges.

# NOBEL BIO CARE

## LAUNCHES NEW COLLAGEN MEMBRANE

Nobel Biocare has launched its latest innovation, creos xeno.protect, beginning in European markets.

This new collagen membrane will be part of a larger regenerative product line under the brand name "creos".

"The introduction of creos xeno.protect emphasizes Nobel Biocare's long-standing commitment to improving quality of life through innovation. It is a product that harnesses the ingenuity of nature to the benefit of the patient, while at the same time making life easier for the clinician," said Nobel Biocare CEO, Richard Laube.

"In simple terms, creos xeno.protect is a superior regenerative solution that supports clinicians in treating more patients better."

The creos xeno.protect resorbable porcine membrane for guided bone and guided tissue regeneration procedures has been designed to be very straightforward and practical in everyday clinical use. Clinical studies and early results from clinicians after an extensive prelaunch period confirm it possesses outstanding handling qualities, maintains its size when hydrated and is extremely tear-resistant.

This means fewer problems when folding and unfolding, easier positioning without graft displacement and less risk of damaging – and therefore wasting – the membrane.

It comes in three practical sizes (15x20mm, 25x30mm, and 30x40mm) to handle larger bone augmentations or smaller periodontal defects. The optimal fit can be found without extensive trimming which limits waste and minimizes costs for both clinicians and patients.

The creos xeno.protect membrane has an extended barrier function that does not compromise on the established high industry standards for biocompatibility or vascularization behavior. It resorbs slowly, providing stable protection of the graft during the required healing period, says Nobel Biocare.



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# VIVASTYLE PAINT ON PLUS VARNISH SYSTEM

THE INNOVATIVE VIVASTYLE PAINT ON PLUS VARNISH SYSTEM FROM IVOCLAR VIVADENT OFFERS A PROFESSIONAL METHOD FOR WHITENING TEETH WITHOUT HAVING TO USE A TRAY.

The VivaStyle Paint On Plus varnish system contains 6 per cent hydrogen peroxide. It is suitable for whitening stained vital and non-vital teeth.

VivaStyle is prescribed by the dentist once a diagnosis has been made and the patient has been appropriately instructed.

The patient carries out the treatment

at home in accordance with the treatment plan set up by the dental practitioner. In the dental office VivaStyle Paint On Plus can be used as an intensive treatment by applying the varnish several times during one appointment.

VivaStyle Paint On Plus is applied directly to the teeth with a brush. The dispensing dishes facilitate dosing.

After the varnish has dried, it stays on the teeth for 10 minutes. The varnish does not dissolve in saliva. Within this short time, the preparation is capable of taking effect.

Subsequently, the varnish is simply removed with a toothbrush. The product can be used to lighten individual teeth as well as entire rows of teeth.

A comprehensive information packet for the VivaStyle system can be ordered for practice staff, including brochures for patient consultations, from the following email contact: [info@ivoclarvivadent.com](mailto:info@ivoclarvivadent.com)



## New Splint Designer CAD software

3Shape has released a unique CAD software tool to the dental market that enables labs to provide common dental appliances as a new service.

The 3Shape Splint Designer is offered as an add-on module to 3Shape Dental System. The new module offers labs a cost-efficient getting-started tool and opens new business opportunities for both dental labs and their dentist-clients.

"3Shape is continuously seeking ways to help labs compete through new service options and Splint Designer is a prime example," says Flemming Thorup, president & CEO at 3Shape. "3Shape's business model provides customers with valuable system upgrades, and this time, we are giving away a complete add-on module with high business potential to our Dental System Premium subscribers as a part of their LABcare package."

### 3Shape Splint Designer overview

- CAD design of Splints, Night Guards, Protectors and similar dental appliances.
- Splints and appliances can be ordered directly through the Dental System Order Form.
- An intuitive workflow guides users through the design steps: open the bite with a virtual articulator, create a shell, add a bar profile on top, combine both parts, and optionally "cut" the design with the antagonist in the included virtual articulators.
- Option to engrave ID tags in the appliance for patient identification or branding of the lab.
- Included free of charge for all 3Shape Dental System Premium subscriptions.



The new Splint Designer module is a light version of the Appliance Designer which is 3Shape's complete CAD toolbox for all types of dental and orthodontic appliances.

The 3Shape Splint Designer module is available with Dental System 2014 through 3Shape resellers. Availability to end-users is dependent on the specific system configuration. [www.3shapedental.com](http://www.3shapedental.com)





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# Multidisciplinary Approach to



QUESTION-AND-ANSWER INTERVIEW WITH DR DAVID PAQUETTE, WHO WILL BE SPEAKING AT IDEM SINGAPORE (4-6 APRIL 2014) ON THE MULTIDISCIPLINARY APPROACH TO PERIODONTAL THERAPY.

According to the American Academy of Periodontology, periodontal disease or gum disease is linked to systemic disease such as diabetes and heart disease, with new research linking it with other systemic diseases such as respiratory disease osteoporosis and even cancer. This makes it necessary for the treatment of periodontal disease to take on a multidisciplinary approach.

The following is a Question-and-Answer interview with Dr David Paquette, whose major research interests include the interplay between periodontal disease and systemic conditions, in particular cardiovascular disease, diabetes and obesity.

**Question: To what extent can the gums be a reflection of a patient's pathology?**

**Dr Paquette:** While systemic conditions like diabetes can lead to poorer gum health (periodontal disease), the presence of inflamed gum tissues is associated with poorer overall health. Patients with periodontal disease and diabetes have poorer glycaemic or blood sugar control. Likewise patients with periodontal disease are at higher risk for developing atherosclerosis and cardiovascular disease.

**Question: Why is it important to take a multidisciplinary approach to periodontal disease?**

**Dr Paquette:** A multidisciplinary approach is most effective in managing the patients' oral and overall needs. Patients may present with complex medical conditions that need to be managed for the delivery of safe and effective periodontal care. The dentist and healthcare team can work together to help motivate the patient to adopt healthy behaviours and preventive strategies for improved oral and overall health.

**Question: To what extent is applying a multidisciplinary approach to treating patients with periodontal disease practical? Can it be made more practical?**

**Dr Paquette:** Dentists need to be competent in collaborating with physicians, physician assistants, nurses, pharmacists and other health care providers. To better serve patients, dentists need to be part of the healthcare team in screening and referring patients at risk for medical conditions in addition to providing dental care. Conversely, physicians, nurses and other healthcare providers need to be comfortable in inquiring about patients' dental health, oral function and behaviors in addition to screening for signs of overt oral disease. This interdisciplinary model can be practical and there are insurance data indicating that it can be cost effective too.



# Periodontal Therapy

**Question: Can a patient suffering from obesity, heart disease and/or diabetes help improve the condition of his gums just by switching to better lifestyle habits? What else needs to play a part to reverse this condition?**

**Dr Paquette:** Unfortunately, bad health behaviors and choices seem to cluster in certain patients. Adopting a healthier lifestyle that includes a well-balanced diet, exercise, not smoking and personal oral hygiene can be effective in improving gum health and overall health. Seeking professional care and definitive periodontal care (for example, scaling and root planing) would be needed to resolve the inflammation especially if there has been frank tissue breakdown as part of the disease process.

**Question: Please comment on the new research linking gum disease with other types of pathology such as cancer and osteoporosis.**

**Dr Paquette:** There are early observational studies indicating that patients with inflammatory periodontal disease may be up to two times more likely to develop head and neck cancer or pancreatic cancer even after adjusting for other risk factors like smoking. Likewise, women with low bone density (diagnosed as osteopenia or osteoporosis) are two times more likely to have periodontal disease.

**Question: While the cause and effect relationship of heart disease is yet to be proven, there are several studies that show that heart disease is often exacerbated by oral infection. Please provide some examples of these studies and the types of heart disease examined in these studies.**

**Dr Paquette:** Population studies indicate that there is a consistent and significant association between periodontal disease and future cardiovascular events (for example, myocardial infarction or stroke) or subclinical atherosclerosis. The odds for periodontal disease and cardiovascular events or atherosclerosis is modest (30% to two-fold increase in risk), but this is magnified by the high prevalence of periodontal disease in populations (up to 50% of the population affected). Other studies have isolated periodontal bacteria in atherosclerotic vessels and have implicated periodontal bacteria in triggering inflammatory events and atherosclerotic changes in vessels.



# WORLD ORAL HEALTH DAY 2014

TRENDING

FDI World Dental Federation is gearing up for the celebration of World Oral Health Day 2014 (WOHD 2014), which will be held on 20 March.

Celebrated around the world, WOHD 2014 focus is on reminding young and old of the importance of protecting the teeth and mouth throughout life.

"Over 90 per cent of the world's population will suffer some form of dental disease in their lifetime but many of these can easily be treated or prevented with a good oral care routine," commented FDI president Dr Tin Chun Wong. "There are more than 2 million oral health care professionals around the world and in 2014 we hope that they will join together with us and our partners, to make World Oral Health Day a worldwide success."

To kick-off the 2014 campaign, FDI has launched a revamped WOHD logo. The revitalized image represents a happy, healthy smile that transmits the essence of World Oral Health Day, a day where everyone around the world can take part in celebrating healthy smiles.

The new logo will be accompanied by a creative campaign that celebrates the positive things that can be enjoyed when one has a healthy mouth such as laughing, eating or kissing.

"We want to celebrate healthy smiles," stated FDI's Executive Director Jean-Luc Eiselé, reiterating this year's campaign claim. "The vitality of the smile seen in our new logo is the same vitality that we want to see in everyone's face on World Oral Health

Day, be it in Nepal, Croatia or Chile. We want to spread the message of good oral health and the importance of a good oral care routine to local communities around the world and reduce the suffering and burden of oral disease."

In addition, FDI has confirmed that World Oral Health Day 2014 will be supported by four key global partners: Johnson & Johnson Family of Consumer Companies, Unilever, Henry Schein and Wrigley Oral Healthcare Program.

"World Oral Health Day is key to raising awareness across the globe of oral health issues; however, it would be impossible to achieve the necessary global impact without the help of our partners," emphasized the FDI president.



**World Oral  
Health Day**  
20th March



## ADA Paper Addresses Bringing Disease Prevention in Oral Health to Communities

The American Dental Association (ADA) has published its latest paper on oral health disparities in underserved populations.

"Action for Dental Health: Bringing Disease Prevention into Communities" is the first of two that will address the importance of disease prevention. It focuses on a broad array of programs nationwide targeting tooth decay and gum disease, the two most prevalent dental problems, both of which are almost entirely preventable.

"There will always be some level of disease that has progressed to the point that restorative care is needed," writes ADA president Charles Norman D.D.S. in the introduction. "But the occurrence of disease can be reduced dramatically. This paper examines what works and why, what more is needed and the rewards that are possible by stopping disease before it starts."

The ADA has launched Action for Dental Health, a major campaign aimed at ending the dental health crisis affecting tens of millions of Americans. Action for Dental Health comprises multiple initiatives to address the complex barriers that impede millions of Americans from accessing adequate dental care.

### These initiatives fall into three distinct areas:

1. Providing care now to people who are suffering. That would include the elderly in nursing homes, children from low-income families, and the uninsured, who are more likely to visit an emergency room for relief from dental pain.
2. Strengthening the public/private dental safety net to dramatically increase its capacity to deliver care.

3. Focus on disease prevention and oral health education through community water fluoridation, the use of Community Dental Health Coordinators, stronger collaboration between dentistry and other health professions, and public health programs in schools and other public and private settings.

"Action for Dental Health now encompasses all existing and new ADA programs and initiatives aimed at improving oral health in underserved individuals and communities," said Dr Norman. "It's an ambitious campaign with no less a goal than a virtual end to untreated dental disease in America. And prevention will be the ultimate key to accomplishing that goal."

For more info, visit the ADA website: <http://www.ada.org>

## Dental and 3D Creative Centre Opens in Sydney

Roland DG Australia has opened the doors to a new Dental and 3D Creative Centre at its Sydney Headquarters in Frenchs Forest.

Officially opened at the company's recent 25th Anniversary Open House event, the new facility will play a major role in expanding Roland DG's presence throughout Australia, New Zealand and the ASEAN region.

The state-of-the-art Creative Centre features Roland's full range of engraving and milling technologies, including the popular EGX Series of engravers and MDX Series of milling machines. A major focus of the new facility is on Roland's Easy Shape Dental Solution and the DWX range of dental milling machines including the DWX-50 and the newly released DWX-4.

Drawing on 20 years of proven milling technology, Roland's open architecture dental solutions enable laboratories and technicians to consistently produce precision prosthetics every time. Roland Easy Shape offers market-leading products, high-quality materials, and sophisticated, cutting-edge technologies that deliver precision results.

In addition to the full range of equipment set up for live demonstrations and product development, the new facility has an adjacent training room that is equipped to hold interactive training sessions and seminars. An array of application samples are also on display, aimed at providing inspiration and showcasing the full potential of what can be



achieved with Roland machinery.

General Manager of Roland DG Australia John Wall said, "We are delighted to open the new Creative Centre for our Dental and 3D products. Creating this dedicated facility is the next step forward in our commitment to expanding our presence in these markets. With these highly technical and precise products we understand the importance of providing a facility where customers can experience the full capabilities of the products on show."



# IADR Appoints Jukka H. Meurman as VICE-PRESIDENT

Members of the International Association for Dental Research (IADR) have elected Jukka H. Meurman, University of Helsinki, Helsinki University Central Hospital, Finland, to serve as the next IADR vice-president.

Meurman is a professor of oral infectious diseases at the Institute of Dentistry and Department of Oral and Maxillofacial Diseases, University of Helsinki. He is also affiliated with Helsinki University Central Hospital, Finland.

His research interests have been focused on oral symptoms, signs and impact of oral infections on systemic health.

He is a Licentiate of Dentistry and Medicine, having earned both licenses from the University of Helsinki. There, he earned two Ph.D.'s and was a Docent in Cariology. He has an M.D. and license in clinical dentistry from the Finnish Board of Medicine. He also is a specialist in clinical dentistry, Finnish Board of Medicine. He has honorary doctorates from Karolinska Institute, Solna, Sweden; Louis Pasteur University, Strasbourg, France; and the Medical University of Plovdiv, Bulgaria.

His many honors include being an invited member of the Finnish Society of Sciences and chair of the biosciences section; invited member of the German Leopoldina Academy of Sciences; fellow ad hominem of the Royal College of Surgeons of

Edinburgh 2012; Knight, First Class, of the Order of White Rose of Finland, which was an honor conferred by the President of Finland in 1996; and Knight (KLJ), the Military and Hospitaller Order of Saint Lazarus of Jerusalem in 2003.

Since joining IADR in 1974, he has remained active in the Association and has served in multiple leadership roles. A few of those roles include being president and secretary general of the IADR Scandinavian Division, chair of the IADR Regional Development Program Committee and an IADR Regional Board Member. Currently he serves as the president of the IADR Pan European Region.

## Dental Fillings that Self-Heal, Fight Bacteria

The American Dental Association and the ADA Foundation have announced that the foundation's Anthony Volpe Research Center (VRC) received a five-year, US\$2.2 million grant from the National Institute of Dental and Craniofacial Research (NIDCR) to develop new resin composite dental fillings.

The grant started last September and the first year's funding is US\$450,000. NIDCR is a part of the National Institutes of Health.

VRC scientists plan to use the grant money to research and develop new polymers that are BPA-free and not susceptible to enzymatic or hydrolytic degradation. They also hope to establish self-healing systems to significantly extend the life of composites, and to formulate smart antibacterial components.

"All the members of our team, including Drs Rafael Bowen, Gary Schumacher, Drago Skrtic and myself, are excited by this grant," said principal investigator, Jirun Sun, Ph.D. "Our overall goal is to make new systems that exceed the performance of current commercially used materials. Ultimately, the new systems will double the service life of tomorrow's dental composites."

Dentists in the United States currently place more than 122 million composite dental fillings every year. But the average lifetime of those composites is only eight years. Current composite filling technology is nearly 50 years old.

"There have been major advances over the past decade in chemistry, microbiology, imaging and other potentially important areas," said Dr Martha Somerman, NIDCR director. "Let's get the right people talking to each other and see if it's possible to double the service life of tomorrow's dental composites."





## Japanese Dental Firms See IDEM Singapore as Launchpad into ASEAN Markets

Japanese exhibitors have much to gain from the upcoming IDEM Singapore dental exhibition, according to show organizers Koelnmesse Singapore.

As the depreciating Yen sees an increase in exports to ASEAN countries to meet the region's demand for high quality Japanese dental products, many Japanese exhibitors see IDEM Singapore 2014 as a timely opportunity for engaging with manufacturers, distributors and dental practices in the ASEAN region and from around the world.

According to 2009 figures, dental exports from Japan accounted for just over three per cent of the world's total dentistry instrument and appliance exports worth over US\$3.6 billion, a percentage that will be expected to increase in 2014 with the weaker Yen making Japanese exports more attractive to the rest of Asia.

Close to 40 per cent of the Japanese exhibitors this year are new. IDEM Singapore 2014, to be held from 4-6 April, also welcomes its first ever Japan Pavilion featuring returning exhibitors such as Kuraray Noritake Dental Inc, Trimunt Corp, Yamamoto Precious Metal Co, Ltd and new exhibitors such as YDM Corporation, all under one roof. Other independent Japanese exhibitors include J. Morita Mfg Corp and Takara Belmont Corporation.

They will be showcasing their products alongside some 450 international exhibitors expected at IDEM Singapore 2014, with other pavilions from China, France, Germany,

Italy, Singapore, Switzerland, Taiwan, the United Kingdom and the United States.

First-time exhibitor Sun Medical Company, a Japan-based dental materials company, says that it is keen to increase its trade in the Asia-Pacific region.

Company spokesperson Sukefumi Tanakubo, the assistant director of the International Department in the Global Business Strategy Division says, "We are looking to break into the Malaysian, Indonesian and Chinese markets because there is much more room for expansion in the ASEAN region, compared to the European and American markets which have stabilized and become saturated."

## BDA Research Identifies Dental Jobs Concerns

More than one-in-ten young dentists completing their vocational or foundation training may be experiencing difficulties finding permanent posts, newly-published research from the British Dental Association (BDA) suggests.

Approximately 12 per cent of those completing their training last summer had not secured a role before its conclusion, the "2013 BDA Survey of Foundation Dentists and Vocational Dental Practitioners" found.

For the second successive year a growing proportion of trainees in England and Wales who participated in the research reported that they were obtaining posts in primary salaried or hospital dentistry, although whether this is a trend or not will only be more reliably established by future surveys.

The research adds to concerns of potential employment problems in dentistry identified by the BDA's 2013 Dental Business Trends Survey. That research found that more than 10 per cent of current Associate Dentists satisfied the International Labour Organisation criteria used by the Office of National Statistics to be classed as under-employed; wishing to work more hours and being available to start doing so within two weeks.

And it follows warnings by Health Education England and the Centre for Workforce Intelligence at the end of 2013 that a potential over-supply of between 1,000 and 4,000 dentists may occur in England by 2040 if the current number of places for dental students is not reduced.

Dr Judith Husband, Chair of the BDA's Education, Ethics and the Dental Team Committee, said: "This research suggests that employment opportunities in general dental practice are not as readily available as they once were for newly-qualified practitioners. In doing so, it adds to the evidence base that must be considered as recommendations to reduce the number of places to study dentistry are contemplated.

"As the BDA has warned, these decisions must be thought about very carefully, taking into account likely changes to the way NHS dental care is delivered and safeguarding the needs of patients. But they must also be responsible to the young people who choose to invest time, money and dedication to pursuing careers in dentistry, and the taxpayers who contribute to the cost of their training.

"These are difficult decisions that must be made, implemented and monitored with great care, and in dialogue with the profession and the academic institutions they will affect."



## Sirona's Investor Relations Awarded and Nominated

Sirona has been honored for its successful investor relations by "IR Magazine" and "Institutional Investor."

"We are very honored that Sirona has received these awards. We know that our success is based on a very competent and capable team of professionals", says Joshua Zable, Vice President Investor Relations at Sirona.

The Company was ranked among America's top companies according to Institutional Investor's "2014 All-America Executive team", the publication's annual Investor Relations survey. Sirona was awarded 3rd place for "Best Investor Relations" program, nominated by the buy-side. Joshua Zable was received 2nd place in the category "Best Investor

Relations Professional" by both the buy-side and the sell-side.

Institutional Investor Magazine publishes global research and rankings throughout the year. In this survey, the magazine asked buy and sell-side analysts to identify the best executives among the US companies they cover and to rate those companies on a range of qualities, including access to senior management and corporate social responsibility. Survey results reflect the opinions of about 1,400 portfolio managers and buy-side analysts and approximately 1,200 sell-side analysts voted across 48 sectors.

Likewise, Sirona says it is proud to be nominated for "Most Progress in IR" award. The awards celebrate the success of those companies and individuals that are pioneers in the IR community.

Furthermore, these leading international awards honor excellence and leadership in investor relations and identify the best corporate IR teams.

The "IR Magazine Awards" encompass the largest assembly of leading investor relations practitioners from across the US. The survey is the only one of its kind: it goes directly to the investment community, via a combination of an electronic survey and one-to-one telephone interviews, and examines the opinions of the people who matter the most in this field. Winners will be announced on March 27 in New York.

## IADR/AADR Publish Clinical Supplement on Implant Dentistry

The International and American Associations for Dental Research (IADR/AADR) have just released the third clinical supplement to the "Journal of Dental Research" (JDR).

Clinical implant dentistry is the focus of the latest clinical supplement, the second in 2013, which will serve as a companion to the December issue of the journal.

This peer-reviewed supplement is dedicated to clinical research in implant dentistry and includes studies representing different designs including randomized controlled trials (RCTs), case-control studies, prospective case series and systematic reviews.

The RCTs have addressed important questions on (i) patient-centered outcomes (Hamdan et al., 2013), (ii) effect of immediate load on biological markers (Prati et al., 2013) and (iii) influence of abutment-implant connections on crestal bone changes (Enkling et al., 2013). Cost-effectiveness of anterior implants vs. fixed dental prosthesis was evaluated in a case-control study (Zitzmann et al., 2013).

Two prospective case series described early implant placement with contour augmentation and 3D-evaluations of ridge alterations after tooth extraction (Buser et al., 2013; Chappuis et al., 2013). Finally, systematic reviews assessed the outcome of dental implants installed in irradiated jaws (Chambrone et al., 2013) and another assessing outcomes of reconstructive procedures in treatment of peri-implantitis

(Khoshkam et al., 2013). The supplement was co-edited by Professor Tord Berglundh from the University of Gothenburg, Sweden.

"I am thankful to the authors who submitted their research for publication in the JDR clinical implant dentistry supplement," said JDR Editor William Giannobile. "I am also grateful to Tord Berglundh who served as guest editor of this clinical supplement. This issue contains a valuable collection of advances in the field that can benefit researchers, clinicians and ultimately our patients."





# THE LEADING DENTIST

Asia's biggest dental community page



Thanks to the growing support of dental professionals, The Leading Dentist is now Asia's biggest dental community page on online social media.

The Leading Dentist is the leading community page for dental professionals in Asia with over 30,000 users who follow the page on Facebook. The online page provides updates on trends and developments in global dentistry, as well as networking and lifestyle services for the community.

The online users come mainly from the Asia-Pacific region including key markets such as Singapore, Thailand, Indonesia, Malaysia, the Philippines and India.

The page has been developed by Dental Practice News (DPN) magazine since November 2010 as part of its efforts to create an online community of dental professionals with a strong focus on the fast-growing Asian markets.

The Leading Dentist mission: To build a leading online network for dental professionals in Asia.

The Leading Dentist page is also part of a regional alliance called Dental Network Asia – an online network for dental healthcare in Asia. The network currently has over 30,000 online users in the region and is poised for further growth in the future.



# Effects of Sugar ON ORAL HEALTH

A study by Newcastle University, Australia researchers into the effects of sugars on oral health recommends cutting down on the sweet additive as part of a global initiative to reduce tooth decay.

Since 1990 the World Health Organisation (WHO) has recommended that intake of “free sugars” should be less than 10 per cent of total energy (calorie) intake. Free sugars are sugars that are added to foods by the manufacturer, cook or consumer plus those naturally present in honey, syrups, fruit juices and fruit concentrates.

The Newcastle University study, commissioned by the WHO and recently published in the “Journal of Dental Research” recognizes the benefit of this threshold, by showing that when less than 10 per cent of total calories in the diet is made up of free sugars there are much lower levels of tooth decay. The research findings go even further, suggesting that halving this threshold for sugars to less than 5 per cent of calories – around five teaspoons a day – would bring further benefits, minimizing the risk of dental cavities throughout life.





Professor Moynihan, Professor of Nutrition and Oral Health at Newcastle University said: “In the past, judgements on recommended levels of free sugars intake were made based on levels associated with an average of three or fewer decayed teeth in 12 year olds. However, tooth decay is a progressive disease – by looking at patterns of tooth decay in populations over time, we now know that children with less than three cavities at age 12, go on to develop a high number of cavities in adulthood.

“Part of the problem is that sugary foods and drinks are now staples in many people’s diet in industrialized countries, whereas once they were an occasional treat for a birthday or Christmas. We need to reverse this trend.”

Considering the studies which examined the influence of fluoride, the experts found that while it does protect teeth, people living in areas with fluoridated water and or using fluoride toothpaste still got dental caries.

Professor Moynihan explained: “Fluoride undoubtedly protects the teeth against decay but it does not eliminate tooth decay and it does not get rid of the cause – dietary sugars. Moreover, not

everyone has good exposure to fluoride through drinking water and or toothpastes containing fluoride.”

Professor Moynihan added: “The public need better information on the health risks of sugary foods and drinks and there needs to be clearer information on the levels of sugars in our foods and drinks. We need to make it easier for people to make healthier choices when it comes to sugars by ensuring that options lower in added sugars are made widely available in schools, shops and the workplace.”

Dr Karin Alexander, president of the Australian Dental Association (ADA) said these findings support the ADA’s stance on diet and dental health. “The ADA has long had the view that dietary education should be targeted to specific high risk age groups:

- Infants and babies – sleeping with comforters, bottles or night feeders containing any sugar products, including milk and fruit juices, should be discouraged.
- Children and young adults – frequent consumption of drinks and foods with high sugar and/or acid content should be discouraged.
- The elderly – increasing the sugar content in the diet of elderly persons, due to their increased risk of caries from reduced saliva levels and more exposed root surfaces, should be discouraged.

The finding also justifies the ADA’s stance that governments should apply a tax on sugar and sugar-containing confectionery and soft-drinks and moneys from such taxation be used to fund dental care for disadvantaged Australians.”

Source: [Australian Dental Association](#)

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THE RESEARCH FINDINGS GO EVEN FURTHER, SUGGESTING THAT HALVING THE THRESHOLD FOR SUGARS TO LESS THAN 5 PER CENT OF CALORIES – AROUND FIVE TEASPOONS A DAY – WOULD BRING FURTHER BENEFITS, MINIMIZING THE RISK OF DENTAL CAVITIES THROUGHOUT LIFE.

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# CERAMIC MATERIALS AND COMPOSITES PROVIDE ESTHETIC SOLUTION

THIS CLINICAL CASE DESCRIBES HOW THE PROSTHETIC TREATMENT PROCESS IS SIMPLIFIED WITHOUT COMPROMISING THE ESTHETIC OUTCOME BY USING A BULK FILL COMPOSITE AND A MONOLITHIC CERAMIC.

**AUTHORS:**

**SEUNGHWAN CHUNG, DDS, MS;  
KYUNG-SIK PARK (SEOUL/SOUTH  
KOREA)**



In the past few years, the range of restorative materials available for dentists and dental technicians has increased remarkably. New technologies have made treatment processes more efficient and enabled dental professionals to fabricate reproducible and predictable restorations which harmoniously blend into the natural oral environment.

In direct restorative treatment with composite materials, the increment

technique has so far been the gold standard. This technique requires applying the material in thin layers and curing these increments individually.

Consequently, it is relatively time-consuming to place restorations and quality issues easily occur. For example, air bubbles between the layers and an increased risk of contamination of the materials can compromise the quality of the restorations.

Today, however, some manufacturers offer composites which can be placed in the cavity in large (bulk) increments. Tetric N- Ceram Bulk Fill, for example, can be cured in layers of up to 4mm.

Similarly significant and practical developments in the ceramic restorative materials sector have also contributed to the advancements in restorative dentistry over recent years. Thanks to the CAD/CAM processing technology, subtractive methods are increasingly





replacing conventional “additive” procedures (layering technique).

The fabricated restorations are able to withstand strong masticatory forces due to their very high stability and they fulfill the esthetic requirements of different clinical situations at the same time. Furthermore, the digitization of various processes ensures not only high quality but also reproducible outcomes.

The following clinical case demonstrates how an esthetic result is easily achieved using a bulk fill composite and a CAD/CAM-fabricated ceramic restoration.

#### Patient case

A 19-year-old female patient presented to our clinic in order for us to restore her osseointegrated implant at tooth 14 (Fig. 1 and 2). After exposure of the implant, a mesial caries lesion was noticed in the adjacent premolar (Fig. 3).

In a first treatment step, a local anesthetic was administered, the caries removed and a clean cavity prepared. Subsequently, a rubber dam was placed in order to prevent any contamination of the working area with saliva during the restorative treatment (Fig. 4).

Then, the cavity dimensions were measured using a probe. The maximum depth was 4mm – a perfect indication for Tetric N-Ceram Bulk Fill (Fig. 5), which would allow us to fill the cavity in only one layering step.

Next, the matrix was placed and the cavity was prepared for the restorative procedure. Therefore, a primer (AdheSE) was applied to the cavity, rubbed in for 15 seconds and allowed to react for another 15 seconds.

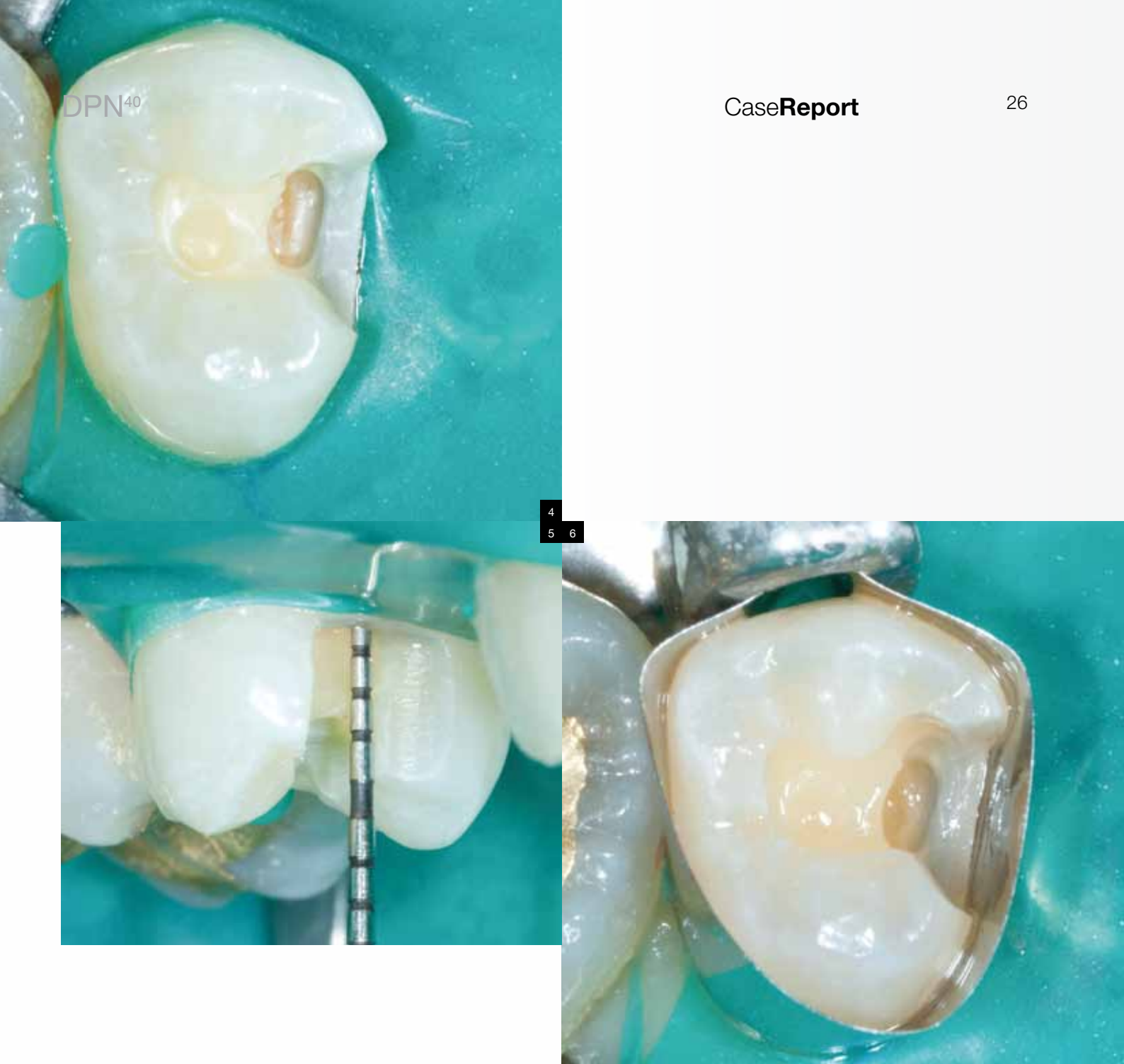
Subsequently, the bonding agent was applied (Fig. 6), dispersed with a stream of air and cured with an LED



1  
2 3







polymerization device (Bluephase 20i, Low mode) for 10 seconds. Finally, the cavity was filled with the bulk fill composite (Tetric N-Ceram Bulk Fill, IVB) using only a single layer (Fig. 7).

After removal of the matrix, the composite was light-cured, finished and polished as usual (Fig. 8).

In a next step, tooth 14 was prosthetically restored. Two weeks after the exposure of the implant, an impression of the dental situation was taken (Fig. 9).

An individualized hybrid abutment was planned to provide the basis of the restoration. For this purpose, an abutment was modeled, pressed (IPS e.max Press, HO) and then adhesively cemented on a titanium base (Multilink Implant).

During the try-in of the abutment, the cervical margin and the emergence profile were examined (Fig. 10). As no additional adjustments were required, the crown was fabricated (IPS e.max CAD, LT A2) and characterized with stains (Fig. 11).

In the permanent cementation of the crown on the abutment, retraction cords were used to minimize the occurrence of excess luting material in the gingival area and to easily and safely remove excess material after curing, if required (Fig. 12 and 13).



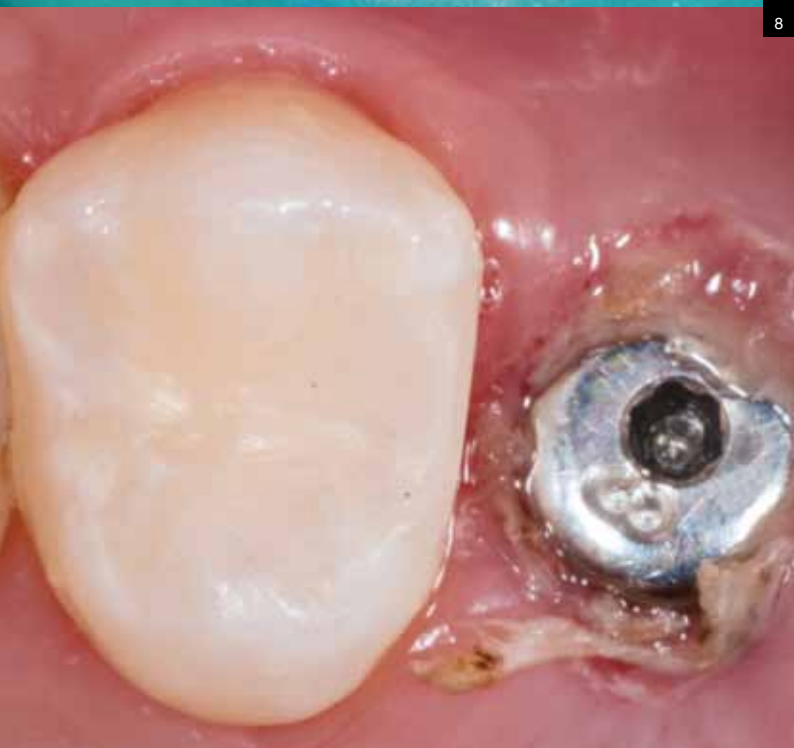


### Conclusion

The further development of dental materials and processing techniques has greatly affected and changed restorative dentistry. Tetric N-Ceram Bulk Fill, which is light-cured in 4mm layers, simplifies direct restorative filling therapy with chairside composites.

IPS e.max CAD, which is processed using CAD/CAM technology, renders the fabrication of restorations very efficient. Furthermore, individualized ceramic layering is no longer required for certain indications.

In the presented case, the implant in the position of tooth 14 was restored with an all-ceramic restoration and premolar 15 was restored with a composite filling (Fig. 14). Although this indication does not seem to be as demanding as anterior restorations, patients nevertheless expect natural-looking results (Fig. 15). Therefore, both dentists and patients desire a simple and efficient procedure, which will produce esthetic results.







10

11 12



1 &amp; 2

Starting situation –  
osseointegrated implant in the  
premolar region.

3

During exposure of the implant, a  
mesial caries lesion was noticed in  
the adjacent premolar.

4

Caries in tooth 15 was removed  
and a rubber dam was placed  
in preparation for the restorative  
treatment.

5

The measuring results produced  
with a periodontal probe showed  
a cavity depth of 4mm.

6

After the placement of a matrix  
band, the adhesive was applied.

7

The cavity was filled with only one  
layer of bulk fill composite (Tetric  
N-Ceram Bulk Fill).

8

The completed composite  
restoration in tooth 15 (mesial).





13  
14

- 9 Two weeks after the implant exposure the time was ideal to take an impression of the situation.
- 10 Try-in of the hybrid abutment.
- 11 The abutment cemented on the titanium base and the completed crown (IPS e.max CAD).
- 12 & 13 After the placement of the abutment, the all-ceramic crown was permanently luted in the oral cavity.
- 14 Occlusal view after the insertion of the crown.
- 15 Labial view. The implant crown smoothly blends into the natural dentition. Similarly, the composite restoration is hardly visible with bare eyes.

15





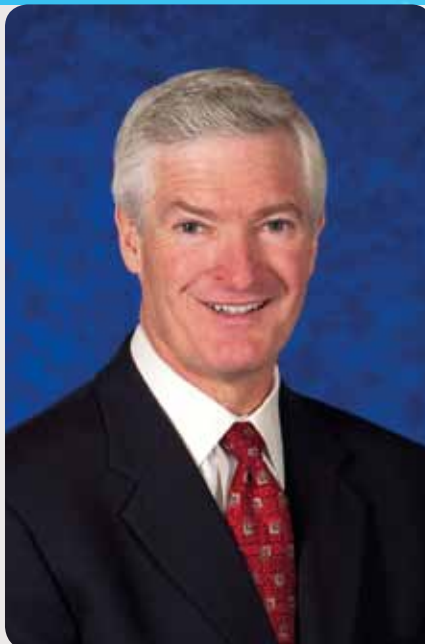
# Infection Management and Alternatives to Antibiotics



AFTER THE PUBLICATION OF ALARMING REPORTS ON ANTIMICROBIAL RESISTANCE BOTH THE EU COMMISSION AND USA'S FOOD DRUG ADMINISTRATION (FDA) HAVE RECENTLY ANNOUNCED STRICTER REGULATIONS AIMED AT CURBING THE OVERUSE OF ANTIMICROBIALS IN THE HOPE OF SLOWING THE GROWING MENACE OF ANTIMICROBIAL RESISTANCE (AMR).

Dr John Molinari will give a lecture on Infection Control at IDEM Singapore.

Prof Ken Hargreaves is a key speaker in the Master Class Lectures at IDEM Singapore.



In light of the above announcements, it is timely for Dr John Molinari and Prof Ken Hargreaves to give talks on infection management and alternatives to antibiotics at the upcoming IDEM Singapore (4-6 April 2014).

In November 2013 the European Commission published the 2013 Eurobarometer survey on antimicrobial resistance (AMR) and the European Centre for Disease Prevention and Control (ECDC) released the latest data on antibiotic resistance in the EU and European Economic Area. Earlier in 2013 the US Center for Disease Control (CDC) also published a review of Antibiotic Resistance Threats.

All three reports were sobering reading and, like previous reports from the World Health Organisation (WHO) and the Alliance for the Prudent Use of Antibiotics (APUA), they highlighted the growing global problem of antimicrobial resistance.







In a telephone interview, Dr Molinari, a microbiologist, said, "I have been lecturing doctors and dentists about the risks of antimicrobial resistance for 20 years; it is a growing public health concern around the world."

Dr Molinari will be presenting a lecture entitled, "Infection Control – Yesterday, Today and Tomorrow", at the IDEM Singapore 2014 scientific conference, sponsored by the infection control specialist Scican.

He believes there are numerous issues involving misperception and the misuse of infection control procedures in all areas of healthcare which are in conflict with the latest scientific and clinical knowledge. He said, "Antimicrobial resistance, the overuse and misuse of antimicrobials is an important issue which I will be addressing in my talk at IDEM."

In an email interview Prof Hargreaves said he would cover this topic in his upcoming lecture at IDEM Singapore 2014.

The professor, an advocate of local antimicrobial therapies in endodontics to reduce bacterial load as an alternative to systemic antibiotics, said, "There is growing recognition of the impact of antibiotic resistance as a health threat. In 2013, the US Center for Disease Control (CDC) published an extensive review entitled Antibiotic Resistance Threats in the United States, 2013.

This report, together with the 2013 Eurobarometer survey (ECDC) report, provide compelling evidence for the prudent clinician to understand this issue and to provide appropriate treatment for odontogenic infections."

Prof Hargreaves went on to illustrate the problem with some alarming statistics. "The numbers are striking. Every year in the US, nearly two million people have infections with antibiotic resistant bacteria and 23,000 of these individuals die from



## “FURTHER RESEARCH IN THIS AREA IS NEEDED, BUT RESULTS TO DATE HAVE LED TO AN EVIDENCE-BASED GUIDELINE FOR TREATING ODONTOGENIC INFECTIONS.”

their infections. It has been estimated that up to 50 per cent of antibiotic prescriptions are made for patients who do not have a medical indication for these drugs. These facts require a re-evaluation of the use of antibiotics in odontogenic infections.”

Prof Hargreaves believes clinicians should consider all possible alternatives before reaching for the prescription pad. “Local antimicrobial therapies have been demonstrated in endodontic research to dramatically reduce bacterial load, leading to the recognition of the importance of this alternative to systemic antibiotics. Further research in this area is needed, but results to date have led to an evidence-based guideline for treating odontogenic infections.”

Prof Hargreaves will be exploring this topic further in the series of Master Class Lectures, sponsored by the Singapore Dental Association at IDEM Singapore 2014.

### Surveillance systems tracking antimicrobial resistance

Back in 1981, the Alliance for the Prudent Use of Antibiotics (APUA) was formed and in 1998 they helped put together the Global Advisory on Antibiotic Resistance Data (GAARD) project in an effort to support and learn from the existing surveillance infrastructure. GAARD brought together the world’s largest surveillance systems, integrating antimicrobial resistance data from the various networks for special studies designed to inform public health policy.

Several of the big pharmaceutical companies agreed to contribute data from their on-going surveillance systems as part of a unique collaboration which saw for the first time the private sector working with public sector entities like the World Health Organization (WHO), the World Health Organization Collaborating Centre on Antimicrobial Resistance, and the United States Center for Disease Control.

In 2005, GAARD published its first report, which included contributions from a variety of other prominent systems tracking resistance worldwide as well as the GAARD group. While it unearthed important trends in global drug resistance, the report also exposed the paucity of coordinated local, national and global surveillance data and called for more thorough and coordinated efforts.

However, this is a call that has met only limited response. It took the EU Commission another eight years before they could announce in 2013 that they had adopted new legislation on the surveillance of AMR which will ensure harmonised monitoring systems in Europe, thus ensuring the comparability of data between its Member States.

While the EU and US have improved monitoring and started to put new regulations in place there has been little or no action in the rest of the world, and especially among developing nations. This leads to Africa, South America, and parts of Asia becoming hotbeds of AMR proliferation, as is the US, albeit for different reasons.

Just as there is no single cause for the increase in AMR, there is no single solution. In the US perhaps the biggest contributing factor is the massive amount of antibiotics used by the animal husbandry industry; about 70 per cent by weight of all the antibiotics is used in the US.

Another major issue is that much of the remaining 30 per cent prescribed to humans is unnecessary. In the developing world self-medication, out-of-date or poorly stored drugs, low dosages, uncompleted cycles, as well as counterfeit drugs all fuel the AMR time bomb.

While dentistry may not yet be the frontline in the AMR war, the growing threat of AMR behoves all healthcare professionals, regardless of their field or where in the world they practice, to consider their own actions and how they can do their own small part to help control the problem.





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# IDEM 2014





# SHOWCASE FOR THE LATEST DENTAL TECHNOLOGY AND INNOVATIONS



Back for its eighth biennial edition, the International Dental Exhibition and Meeting (IDEM) Singapore 2014 is a “must-attend” event for dental practitioners and professionals in Asia Pacific looking for the latest technology and innovations in dental solutions and services.

IDEM Singapore 2014 runs from April 4 to 6 with a pre-congress day on April 3 at the newly renovated SUNTEC Convention and Exhibition Centre. The conference theme this year is “Dentistry – The Future Is Now” with its program focusing on the future of dentistry, addressing the different challenges in the various fields of dentistry.

IDEM Singapore attracts exhibitors from around the world who are eager to engage potential clients from the Asia Pacific region looking for the latest advancements in dental technology.

Among the many technological advancements on display this year, digital dentistry is one of the areas that has captured a fair amount of attention among the dental and dental trade professionals. Many of the visitors at this year’s IDEM Singapore will be attending to see the latest digital technology from fields such as CAD/CAM, intraoral and extraoral radiography and computer-aided implant dentistry, so they can gather all the information they need to make informed decisions about which technologies will best prepare their practices for the future.

Tim Mitchell, Delcam’s Vice President of Healthcare Division Asia says, “Asian dental labs were at first relatively slow to embrace digital technology compared to their counterparts in the West. However, in the past three years there has been a dramatic uptake of this technology in some parts of Asia, such as China, Taiwan, Japan and Korea; now Delcam is focusing more of its attention on developing markets in Asian countries such as Vietnam, Thailand, India and Indonesia. Exhibiting at IDEM Singapore is a key part of that strategy.”

South Korea is an example of Asia’s rapid adoption of new digital dentistry technologies in both dental practices and labs, one that has turned the country from a net importer of dental implants to a net exporter in less than five years.

Mr Mitchell predicts more Asian countries will follow suit. He says, “Last year more than 50 per cent of Delcam’s dental product sales were to Asian countries. With the predicted growth in the dental markets in South East Asian countries, we expect that percentage to increase over the next few years.”

The two new country pavilions from China and Japan are indications of the growing interest in the developing ASEAN markets from both Eastern and Western manufacturers. The new Japanese pavilion will include returning exhibitors such as Kuraray Noritake Dental Inc, Trimunt Corp, Yamamoto Precious Metal Co, Ltd and new exhibitors such as YDM Corporation, all under one roof, as well as other independent Japanese exhibitors such as J. Morita Mfg Corp and Takara Belmont Corporation.





Other Asian countries including Singapore, and Taiwan, will also have national pavilions as will the big players from the West such as France, Germany, Italy, Switzerland, the United Kingdom and the United States. With the hundreds of independent exhibitors added to the mix, it brings international exhibitor numbers for IDEM Singapore 2014 to around 450.

To accommodate the influx of new exhibitors and attendees, the exhibition space has been increased by 30 per cent to a massive 16,000sqm, occupying two whole floors of the convention centre.

Delegates may attend a variety of lectures, courses and roundtable discussions conducted by leading voices of authority in dentistry. Ray Williams will be lecturing on the Oral Health-General Health Connection: A 2014 Perspective and moderating a roundtable discussion entitled Dental Implants the Forefront – 2014 and Beyond. Ken Hargreaves will be giving three SDA Masterclass Presentations entitled Regenerative Endodontics, Successful Management of Acute Dental Pain as well as Issues in Managing the Persistent Endodontic Infection. Gordon Christensen will be conducting a Pre-Congress Day lecture on Making Real World Practice Productive and Enjoyable.

Aside from the main scientific programs, there will also be several new tracks that will appeal to the rest of the dental team members. These new tracks include the Dental Hygienist and Therapist Forum, the New Dentist Forum for final year dental students and young dentists within their first few years of embarking on their careers, and the Dental Technician Forum.

Dental Practice News (DPN) Magazine will be distributed at IDEM 2014.

IDEM Singapore is jointly organised by Koelnmesse and the Singapore Dental Association. For more information, visit: [www.idem-singapore.com](http://www.idem-singapore.com).



# INTERNATIONAL EXPERT SYMPOSIUM 2014



Inspired by the success of the first International Expert Symposium held in Berlin in 2012, Ivoclar Vivadent will host the second symposium on 14 June 2014.

This time, the event will take place in London, United Kingdom. Dental professionals from all parts of the world will be offered the opportunity to listen to high calibre lectures and exchange their experiences.

The Symposium will revolve around the theme of "New monolithic and advanced restorative concepts". Distinguished speakers from universities, dental practices and dental laboratories have been engaged to share their ideas on the subject.

## Highlights of key lectures

- The Symposium will kick off with the lecture of James Russell, BDS, and Robert Lynock (UK), who will explain why teamwork is essential in the fabrication of all-ceramic restorations.
- Bart van Meerbeek, DDS, PhD, (Belgium) will present a state-of-the-art adhesive technique that yields reliable results.
- Michele Temperani from Italy will explore the topics of all-ceramics and CAD/CAM technology, which, in combination, lead to esthetic restorative results.
- Eric van Dooren, DDS, (Belgium) and Murilo Calgaro (Brazil) will look at esthetics from another perspective: They will focus on implant-supported restorations made of high-strength ceramics.
- "Reliable, fast and efficient" is how Markus Lenhard, DDS (Switzerland) characterizes the technique he uses in the direct restoration of teeth.
- Van P. Thompson, DDS, PhD, (USA) will delve more deeply into the scientific aspects. His lecture is entitled "Biomechanical sorting of monolithic crown CAD/CAM materials".
- Not as scientific, but still informative is the lecture of Stefen Koubi, DDS, PhD, from France. He will provide an answer to the question: "Ultra-thin ceramic restorations everywhere: A myth or a reality?".

- Rafael Piñeiro Sande, DDS, from Spain will explore the modern expectations placed upon esthetics.
- Daniel Edelhoff, DDS, PhD, and Oliver Brix (Germany), will give a lecture entitled, "Exploring the limits: High esthetics in complex oral rehabilitation" based on their personal experiences.

## Ivoclar Vivadent & Friends in London

As a prelude to the International Expert Symposium, the "Ivoclar Vivadent & Friends in London" party will be held on the eve of the Symposium. The participants will be able to spend an evening of fine dining and music among friends in the unique setting of the Natural History Museum.

## Special rates for early birds

The International Expert Symposium will take place at The Queen Elizabeth II Conference Centre, Broad Sanctuary, right in the heart of the London borough of Westminster.

Registrations can be submitted online at <http://www.ivoclarvivadent.com/ies2014>. For early bird registrations until 16 May 2014, a discount of 25 per cent will be granted. The congress language is English, while simultaneous translation into German, French, Italian, Spanish and Russian will be provided.





# INACTIVE MIDDLE AGED MEN AT RISK OF GUM DISEASE

INACTIVE, MIDDLE AGED MEN ARE AT GREATER RISK OF DEVELOPING GUM DISEASE COMPARED TO MEN WHO REGULARLY EXERCISE, ACCORDING TO A STUDY.

Researchers discovered moderate to severe gum disease was associated with low levels of exercise in men aged 45-65, most of who worked in offices.

The research [1], which took place at Hannover Medical School, studied 72 healthy men who did not join in any sporting activity and had a predominantly sitting working position. Their gums were assessed during an exercise test, and results showed high age and low levels of physical activity were associated with moderate to severe gum disease.





Most people have some form of gum disease, and it is the major cause of tooth loss in adults. However, the disease develops very slowly in most people, and it can be slowed down to a rate that should allow you to keep most of your teeth for life.

Previous research has also shown people who exercise regularly, have a healthy lifestyle and a normal weight were 40 per cent less likely to develop gum disease. Chief Executive of the British Dental Health Foundation, Dr Nigel Carter, used the research to remind people, especially those highlighted in the study, about the importance of good oral health.

Dr Carter said: "People see the health of their mouth and the health of their body as two very different things, but it is becoming increasingly clear that this just isn't the case. This research pinpoints a very high-risk group who need to review their current habits.

"Whether you have concerns about the state of your teeth or your general health and fitness, you need to consider the bigger picture. Gum disease affects around 19 out of 20 of us at some point in our lives. As well as links to a whole host of general health conditions, it is also by far the most common cause of tooth loss in adults.

"Desk grazing may seem relatively harmless, but constantly snacking on crisps, chocolate, dried fruit and sugary drinks cause teeth a whole host of nightmares. Frequent consumption of sugary foods and drinks naturally weakens the enamel on the teeth, and as a result, the Foundation recommends eating three square meals a day instead of having seven to ten 'snack attacks'. If people do snack between meals, choose foods and drinks that do not contain sugar, limiting the amount of time the mouth is at risk."

Dr Carter continued: "We already know that poor oral health can have a negative effect on the rest of your body and the fact that gum disease increases your chances of developing heart disease, heart attacks, diabetes, strokes and low birth weight babies needs to be taken very seriously indeed.

"To stay healthy you need to adopt a good routine that includes, but isn't limited to, brushing for two minutes twice a day with fluoride toothpaste, cutting down how often you have sugary foods and drinks and visiting the dentist regularly, as often as they recommend.

"If you are serious about your health – and your teeth – you should also clean in between your teeth with interdental brushes or floss. If your gums do start to bleed this is a sign that you may have not been cleaning well enough so increase your toothbrushing. If things do not settle within a few days get along to the dentist before the problem becomes irreversible and you start to lose teeth." **Source: British Dental Health Foundation**

#### Reference

1. Eberhard J, Stiesch M, Kerling A, Bara C, Eulert C, Hilfiker-Kleiner D, Hilfiker A, Budde E, Bauersachs J, Kück M, Haverich A, Melk A, Tegtbur U Moderate and severe periodontitis are independent risk factors associated with low cardiorespiratory fitness in sedentary non-smoking men aged between 45 and 65 years. *Journal of Clinical Periodontology* 2013; doi:10.1111/jcpe.12183.



# LEADERSHIP IN DENTISTRY

Dentists perceive professional leadership as closely related to leadership in their own dental practices and value this type of leadership most highly. About 40 per cent of respondents in a survey in the United States reported that they engaged in current leadership activities in their communities, and 32 per cent reported doing so in professional organizations.

SOURCE: ADA, BASED ON SURVEY DATA FROM 593 ADA MEMBERS (MEAN AGE, 51 YEARS). SEVENTY-SEVEN PER CENT OF RESPONDENTS WERE MALE AND 85 PER CENT WERE EUROPEAN AMERICAN.

## Most frequently reported aspects of Leadership

Leadership in one's own practice  
**31%**

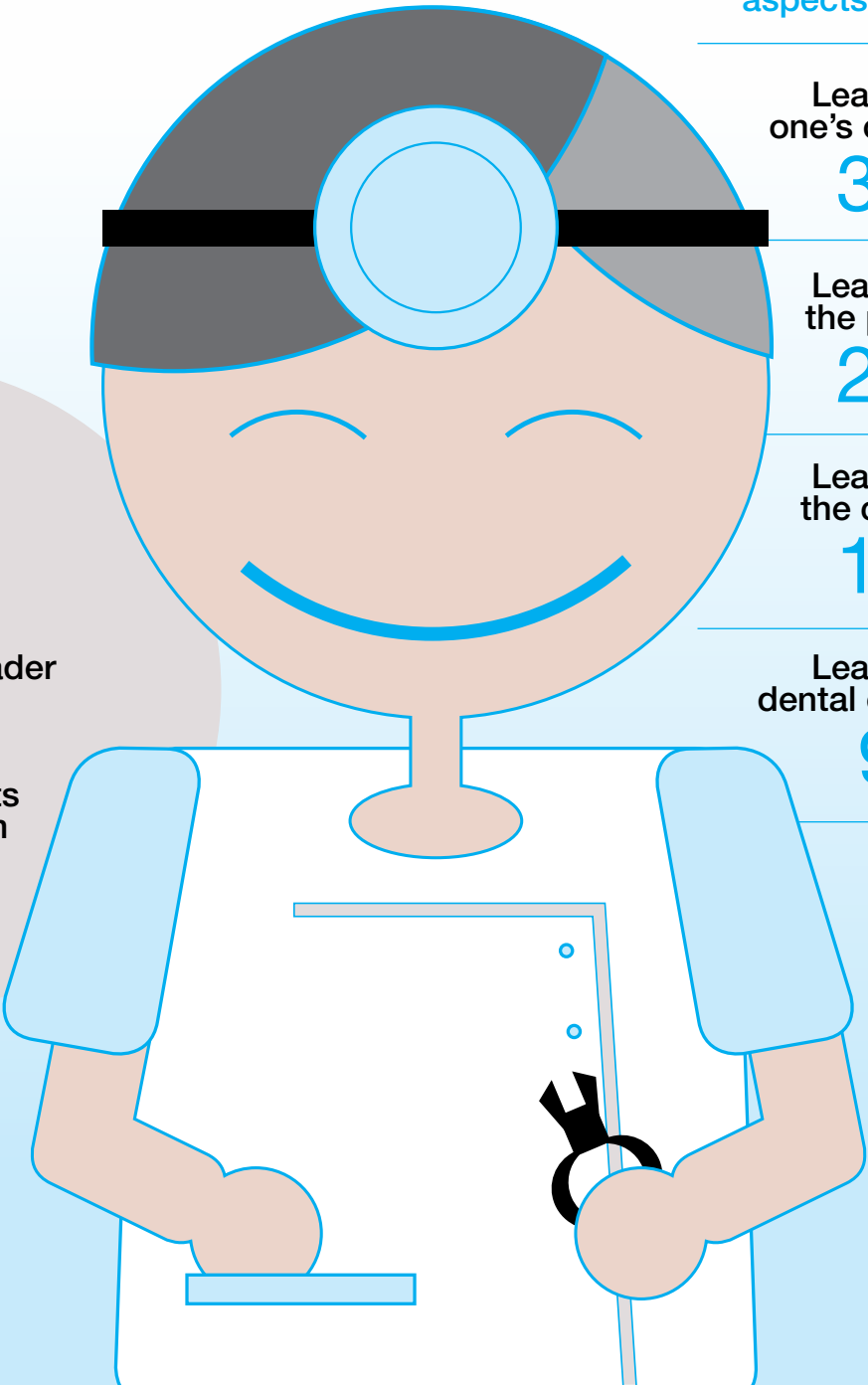
Leadership in the profession  
**26%**

Leadership in the community  
**14%**

Leadership in dental organizations  
**9%**

## Most valued aspects of Leadership

- Being a good leader in one's own practice
- Having patients perceive them as leaders





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are your **teeth sensitive**?

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are you undergoing **chemotherapy**?

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# TRICKEYE MUSEUM

to open at

## Resorts World Sentosa



Come mid-2014, Resorts World Sentosa (RWS) Singapore will be home to Southeast Asia's first Trickeye Museum.

This new interactive museum will be sited at the integrated resort's Waterfront. Occupying an area of 800 square meters, the museum will feature six theme zones, with 80 three-dimensional paintings and optical illusion masterpieces.

"Trickeye" is derived from the French compound word - Trompe-l'oeil - meaning "trick of the eye". Guests visiting this museum can expect paintings that stimulate creativity and imagination techniques through their vision. Not only will they see with their eyes, the museum requires the active participation of guests to become subjects within the masterpieces.

In conceptualizing the museum at RWS, Trickeye took into account some of the most remarkable aspects of Singapore - a cosmopolitan city with a thriving ecosystem of nature and wildlife - and transferring them into artworks. The six zones will

cover the themes of Love, Circus, Masterpiece, Safari, Fairytale and Adventure.

The works displayed will also blend together cultures of East and West in interesting ways, reflecting the melting pot culture of Singapore.

Trickeye Museum will be one of the anchor tenants at the Resort's Waterfront.

Ms Sujin Seong, Director of Trickeye Museum said, "Since we initiated this popular concept in Seoul back in 2010, we have always aimed to expand the footprint of Trickeye beyond the shores of Korea. As a key tourism hub, Singapore was the obvious choice, and Resorts World Sentosa is a prime spot to set up our first overseas venture.

We believe that Trickeye Museum will complement the resort's existing offerings and provide more compelling reasons for tourists from around the world to come visit."





The Jakarta International Java Jazz Festival 2014 – more popularly known as Java Jazz Festival – will be held from 28 February to 2 March 2014 at the Jakarta International Exhibition Center, Kemayoran, Indonesia.

The jazz festival will not only showcase performances by world-renowned Jazz musicians but also offer a different ambience to the show. It will also include Latin jazz fused with modern jazz grooves.

Besides jazz music, this year's event will also feature special Wayang, Batik, and other traditional Javanese art designs to celebrate the 10th edition of the Java Jazz Festival.

Among the international performers appearing in the festival are: India Arie, Jamie Cullum, Natalie Cole, Tania Maria Incognito, Ivan Lins, Snarky Puppy, Dave Koz, Roy Ayers, Sadao Watanabe, Earth Wind and Fire Experience, Magnus Lindgren, Allen Stone, Norman Brown, Nils Petter Molvaer, Lonnie Liston Smith, Jonathan Butler, Gerald Albright, James Taylor Quartet, Soren Bebe, Mindi Abair, Robert Glasper Experiment, Timo Lassy, Rick Braun, Richard Elliot, Jeff Lorber, and Cristina Morrison.

Java Jazz Festival 2014 has also gained support from embassies from the Scandinavian countries such as Sweden, Norway, Finland and Denmark, as well as from Australia and Brazil.

Java Jazz Festival was first staged in 2005 with 11 performance stages. It was acknowledged by the Indonesian Museum of Records as the biggest jazz festival in the world in 2010 with 19 performance stages featuring 232 shows by a total of over 1,500 musicians. In 2013, the show recorded the highest number of audience attendance of 107,372 people.

For more info, visit the website: <http://www.javajazzfestival.com>

# Java Jazz Festival 2014



MEETINGS  
EXHIBITIONS  
WORKSHOPS

## IDEM Singapore 2014

**DATE** 4-6 April 2014  
**VENUE** Suntec International Convention & Exhibition Centre, Singapore  
**ORGANIZERS** Koelnmesse/Singapore Dental Association  
**WEBSITE** [www.idem-singapore.com](http://www.idem-singapore.com)

## UAE International Dental Conference & Arab Dental Exhibition – AEEDC

**DATE** 4-6 February 2014  
**VENUE** Dubai International Convention & Exhibition Centre, UAE  
**WEBSITE** <http://aeedc.com>

## Australian Society of Periodontology Conference

Keynote speakers: Prof Maurizio Tonetti and Prof Mariano Sanz

**DATE** 20-22 February 2014  
**VENUE** Hilton Hotel, Sydney, Australia  
**WEBSITE** <http://asp2014.com.au>

## 4th Borneo Dental Congress

**DATE** 22-23 February 2014  
**VENUE** Pullman Hotel, Kuching, Sarawak, Malaysia  
**ORGANIZERS** Malaysian Dental Association Eastern Zone  
**WEBSITE** <http://www.mda.org.my>

## Dental South China International Expo 2014

**DATE** 6-9 March 2014  
**VENUE** China Import & Export Fair Pazhou Complex,

Guangzhou, China  
**WEBSITE** <http://www.dentalsouthchina.com>

## FDI Continuing Education Program

**DATE** 14-15 March 2014  
**VENUE** Phnom Penh, Cambodia  
**ORGANIZERS** Cambodian Dental Association  
**WEBSITE** [www.fdiworlddental.org](http://www.fdiworlddental.org)

## ADX14 Sydney

**DATE** 21-23 March 2014  
**VENUE** Sydney Harbour Expo, Australia  
**ORGANIZERS** Australian Dental Industry Association (ADIA)  
**WEBSITE** <http://adia.org.au>

## MDA/FDI Scientific Convention & Trade Exhibition

**DATE** 30 May - 1 June 2014  
**VENUE** KLCC Convention Centre, Kuala Lumpur, Malaysia  
**ORGANIZERS** Malaysian Dental Association  
**WEBSITE** <http://www.mda.org.my>

## Bandung Dentistry 2014

**DATE** 12-14 June 2014  
**VENUE** Aston Primera Pasteur, Bandung, Indonesia  
**ORGANIZERS** PDGI Bandung  
**WEBSITE** <http://bandungdentistry.com/11>

## 36th Asia-Pacific Dental Congress

**DATE** 17-19 June 2014  
**VENUE** Dubai, United Arab Emirates  
**ORGANIZERS** Asia Pacific Dental Federation  
**WEBSITE** <http://apdentalcongress.org>

## FDI Continuing Education Program

**DATE** 28-29 June 2014  
**VENUE** Colombo, Sri Lanka  
**ORGANIZERS** Sri Lanka Dental Association  
**WEBSITE** [www.fdiworlddental.org](http://www.fdiworlddental.org)

## FDI Continuing Education Program

**DATE** 7-8 August 2014  
**VENUE** Hanoi, Vietnam  
**ORGANIZERS** Vietnam Odontostomatology Association (VOSA)  
**WEBSITE** [www.fdiworlddental.org](http://www.fdiworlddental.org)

## SEAADE-IADR 2014

**DATE** 10-14th of August 2014  
**VENUE** Borneo Convention Centre Kuching, Sarawak, Malaysia  
**ORGANIZERS** IADR South East Asia/SEAADE  
**WEBSITE** <http://www.iadr-seaade.org>

## FDI Annual World Dental Congress 2014

**DATE** 11-14 September 2014  
**VENUE** Greater Noida, NCR New Delhi, India  
**ORGANIZERS** FDI World Dental Federation  
**WEBSITE** [www.fdiworlddental.org](http://www.fdiworlddental.org)

### NOTE:

The dates and programs of these dental events may be subject to change. Please contact the event organizers for more information.



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### A CONTINUAL EDUCATION PROGRAM THAT IS TAILORED TO YOUR NEEDS

In four power-packed days of lectures and workshops, IDEM Singapore 2014 caters to Dentists and the rest of the dental team, including Dental Technicians, Dental Hygienists and Dental Therapists. A diverse range of topics and educational sessions will be presented, so you can tailor a valuable program that is relevant to your needs.

#### Planned Topics Include:

Regenerative Endodontics • Making "Real World" Practice Productive and Enjoyable • Future of Dental Implants • Developing your Ideal Practice • Multidisciplinary Approach to Periodontal Therapy • Adult Orthodontics Today

#### Speakers Highlights:

 <b>David Bartlett</b> United Kingdom	 <b>John O. Burgess</b> USA	 <b>Gordon J. Christensen</b> USA	 <b>Barry K. Freyberg</b> USA	 <b>Ken Hargreaves</b> USA	 <b>Samuel B. Low</b> USA
 <b>Chatchai Kunavisarut</b> Thailand	 <b>Chun-Pin Lin</b> Taiwan	 <b>Will Martin</b> USA	 <b>John Molinari</b> USA	 <b>Dean Morton</b> USA	 <b>Young Guk Park</b> South Korea
 <b>David W. Paquette</b> USA	 <b>Nigel Pitts</b> United Kingdom	 <b>Benoît Philippe</b> France	 <b>Derrick Setchell</b> United Kingdom	 <b>Ray Williams</b> USA	

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