

III-defined and often misleading An interview with Dr Nikos Mattheos, Hong Kong,

about education standards in implant dentistry and the reason the field does not qualify to be an independent specialty.



What's on in Dublin

Apart from its renown bar and pub scene, Dublin offers something for nearly everyone. Find tips how to spend your time off in the Irish capital in our



New products in focus

The 22nd Annual Scientific Congress of the European Association for Osseointegration is an excellent opportunity to see state-of-the-art technologies in the field of dental implantology.

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Clear, sunny start for Dublin meeting of the EAO

Latest concepts and technologies in dental implant rehabilitation discussed until Saturday

■ Under a warm, clear Dublin sky, dental professionals from around the globe gathered on Wednesday at the Convention Centre Dublin for the 22nd Annual Scientific Meeting of the European Association for Osseointegration. Held for the second time in the Irish capital since 1995, the congress aims to evaluate the latest concepts and innovation in dental implant rehabilitation and other issues related to the field. On Friday, for example, the use of implants in an ageing population will be discussed.

Thousands of dental professionals from Ireland and abroad are expected for the event, which is also presenting the latest materials and products in the field at an industry exhibition on the ground floor. Leading providers have announced the launch of new implant lines and digital



WELCOME TO IRELAN

treatment solutions that will help dentists achieve better treatment outcomes for their patients.

More information about the meeting, scientific sessions and industry exhibition is available on the EAO congress website. The association has also recently launched the latest version of its application for mobile devices and tablet computers that is aimed at giving visitors quick access to congress-related information. Daily news updates, interviews and product reviews from the show floor are available on the Dental Tribune website at www.dental-tribune.com. The newsfeed can also be accessed by scanning the QR code below. ◀



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"The term 'implantologist' is ill-defined and often misleading"

An interview with Dr Nikos Mattheos, Hong Kong

■While dental implantology has seen tremendous growth in the last 20 years, education standards for the field, particularly at university level, are still lacking. A recent European consensus workshop on implantology education in Budapest in Hungary sought to discuss ways to assure quality and effective education in implant dentistry. Today International spoke with Dr Nikos Mattheos, one of the organisers of the workshop and a EAO presenter, from the University of Hong Kong's Faculty of Dentistry $about\,education\,standards\,in\,implant$ dentistry and the reason the field does not qualify to be an independent specialty.

Today International: Dental implants have gained a negative image recently in countries like Japan. Is this perception due to portrayal by the media, or to some extent to the lack of education and skills in placing dental implants?

Dr Nikos Mattheos: It is true that a wave of negative publicity recently affected the whole of implant dentistry in Japan. A few high-profile cases of complications after the placement of dental implants were picked up by the daily press and blown out of proportion, with the help of some negative statistics. This had a direct and drastic impact, as the number of treatments with dental implants dropped dramatically within a short period.

news

It is unfortunate that as a result of this negative publicity many patients who could benefit from implant treatment significantly are becoming increasingly hesitant to seek or accept implant treatment. But it also an opportunity forus all to stop for a minute and reflect on the way implant dentistry is being practised today. In the case of Japan, it is true that the way the media chose to present the topic might have contributed to the sudden burst of negative publicity, but it is

also true that implant dentistry is not always carried out to the highest standards, and Japan is no different to the rest of the world in this regard.

After more than 30 years of research and development, implant dentistry has today achieved the technology and protocols that can ensure highly predictable and sustainable treatment outcomes applicable to a wide portion of the population. At the same time, we are witnessing an increasing trend of compromising the standards that have led to this highly predictable success, possibly owing to pressure from market forces and the need to reduce costs or simply a lack of adequate education. This compromise can take many forms: it can be compromise in the education and skills of the operator, compromise in the selection of patients, compromise in the protocols followed or, frequently, compromise in the quality of the material and the devices used.

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Such a compromise is a ticking bomb not only for implant dentistry, but also for the dental profession as a whole. Dental hospitals and specialist clinics are often the final recipients of complications with dental implants, as patients are referred there after failed implant treatments. At this point, I can already say that the number of complications we see in referral clinics is much higher than

what one would expect based on published research. Therefore, it is imperative to ensure quality education and strict adherence to evidence-based protocols for all practitioners of implant dentistry. Otherwise, the risks are high and will affect us all. As demonstrated in Japan, patients' trust is our most precious investment and it does not take much to jeopardise it.

According to some studies, including recommendations of the first workshop on dental implant education in Europe that you co-ordinated in 2008, there is a wide discrepancy in undergraduate education regarding implant dentistry training. Would you agree with that statement, and what are the consequences for the quality of implant placement?

To be more precise, there is discrepancy between what a general dentist is expected to know/perform inimplant dentistry and what the current education in most schools is teaching. Nowadays, a general practitioner should be able to discuss with his or her patients the treatment option of dental implants when indicated, regardless of whether he or she will undertaking the placement himself or herself or just the restoration of the implants.

Moreover, a general practitioner must be able to maintain patients with dental implants and prevent or diagnose biological and technical complications early. There is an increasing number of patients with dental implants and the general practitioner has a key role in maintaining long-term health. Unfortunately, most dental curricula have not developed to the point where the graduates have the skills and competencies in implant dentistry that are necessary for modern practice.

In addition, there is great diversity in the knowledge and skills that universities provide in their undergraduate programmes. Our latest research in preparation for the second consensus workshop in Budapest this summer has shown that this diversity still persists among European schools, although significant improvement steps have been taken since the previous workshop held in Prague in 2008. All dental schools have increased the amount of teaching in the area of implant dentistry in the past five years and in many cases preclinical and clinical education components have been introduced. However, it is clear that there is still room for improvement.



Dr Nikos Mattheos

Several initiatives to standardise norms and guidelines in implant education already exist. What are the main obstacles to implementing them?

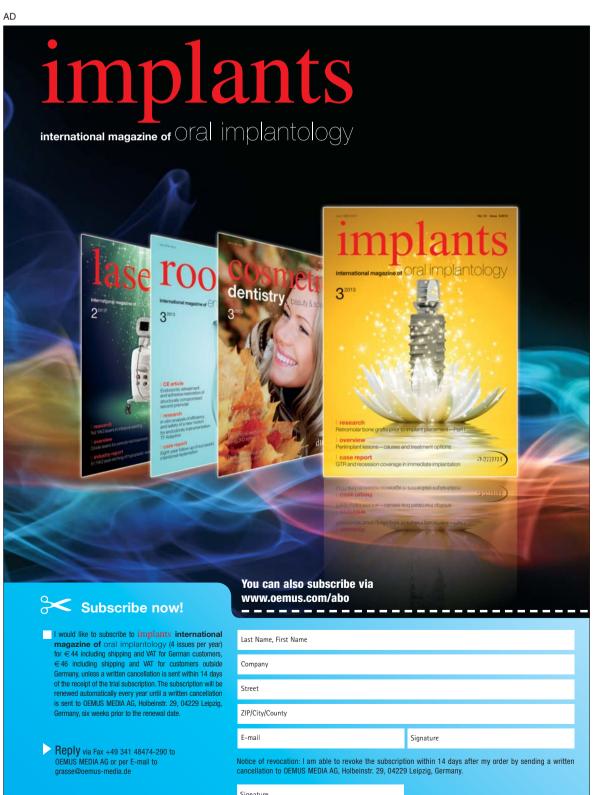
In 2008 in Prague, we managed to come up with a consensus on the knowledge and competencies a general dentist today must possess in implant dentistry. It is without a doubt that general practitioners must have a thorough understanding and certain skills, regardless of whether he or she will choose to place or restore dental implants.

What we realised in 2013 however is that although it is relatively easy to identify what a general practitioner needs to know it has proven to be a very difficult exercise to implement this knowledge in the dental curriculum for most dental schools. The lack of time in the curriculum, lack of resources or staff, as well as departmental fragmentation, make the implementation of implant dentistry a challenging task for dental schools. Progress has been achieved nevertheless.

Virtual implant planning and guided implantology have the potential to enhance implant treatment outcomes significantly. Are these technologies of benefit to dental implant education or do they make it more challenging?

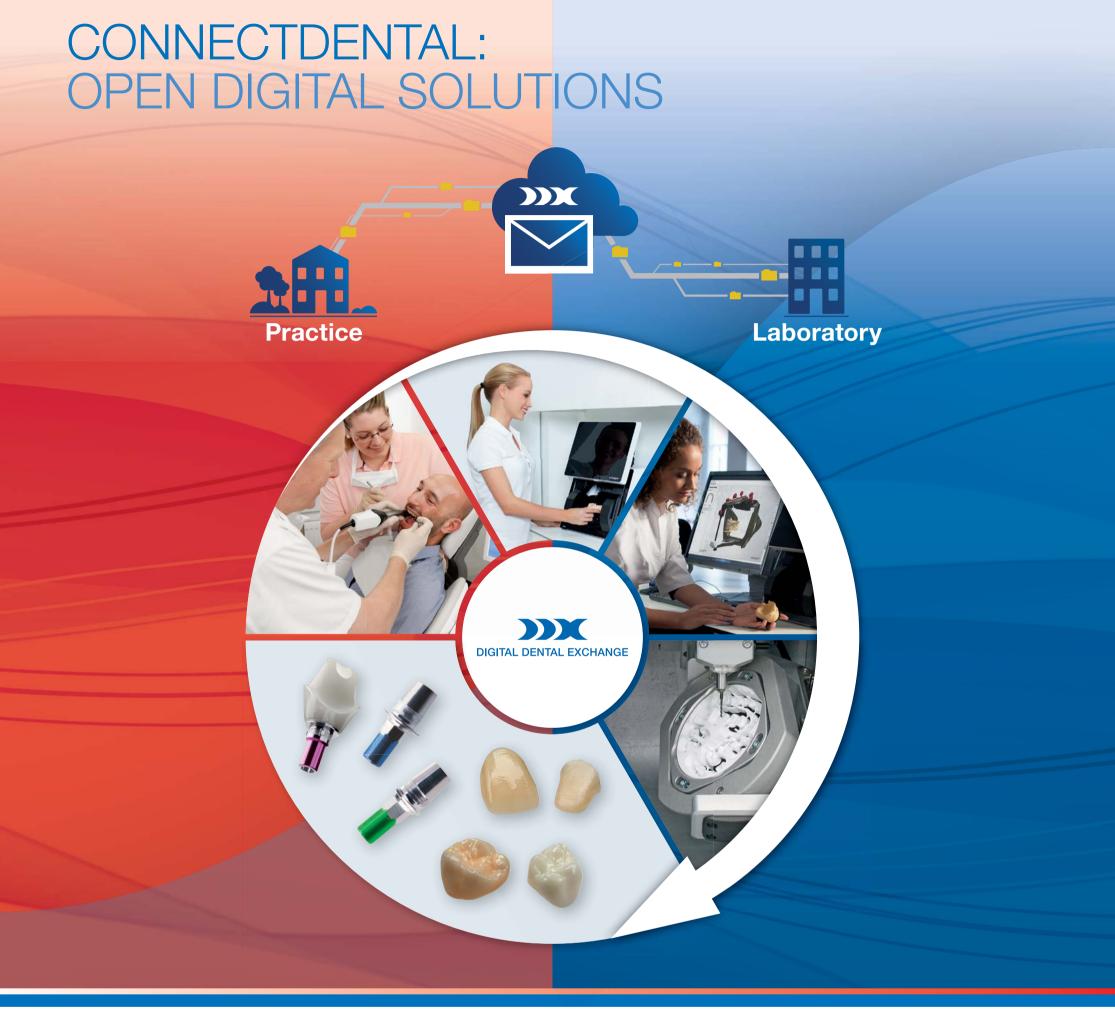
Technology has offered many solutions to clinical problems, and computer-aided planning in combination with CAD/CAM technology has opened up possibilities for effective and quick treatment of rather complex cases. Although such technologies are certainly promising, there are still challenges related to their application. Many clinicians mistakenly see such technologies as compensating for a lack of clinical experience, as they are often led to believe that with the help of guided surgery even a relatively inexperienced clinician can undertake complex treatments with safety and this is a dangerous illusion.

Another limitation is the high cost of such technology, which makes the investment worth while only when undertaking relatively large reconstructions. However, there is no doubt that in the hands of an adequately trained clinician computerguided surgery combined with CAD/CAM technology can improve the quality of service offered to the patient and introduce many new possibilities.



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Providing less invasive treatments

An interview with Prof. Christoph Hämmerle, Switzerland, on short implants

news

■Short implants have gained increasing popularity in the field. Prof. Christoph Hämmerle about benefits, indications and challenges.



Prof. Christoph Hämmerle, Switzerland

Looking at the latest publications in implant dentistry, it seems that interest in short implants is increasing. What can be considered a short implant and what do you think is driving the professional interest in these implants?

Prof. Christoph Hämmerle: There are different definitions for short implants. The EAO consensus conference defined them as 8 mm and less. The high interest comes from the possibility to provide less invasive treatments. Furthermore, short implants can lead to fewer complications and less morbidity. They decrease the costs, can deliver more predictable outcomes and are also easier to perform in many cases.

With short implants you also need less complex diagnostics and you run fewer risks sometimes. All these factors make short implants an attractive option, often providing a completely different strategy for implant placement.

You mentioned some cases where short implants can make a difference. What are their main indications, in your opin-

Short implants are primarily used in the posterior segment of the jaw, because in the anterior segment there is generally sufficient bone height for regular implants. In addition, in atrophic mandible and maxillary, where the vertical space is limited, short implants can have some clinical The latest improvements in implant materials and surfaces promise higher osseointegration and mechanical stability. Do you believe these properties can compensate for the smaller implant dimensions?

Absolutely. Medium-rough surfaces provide a better anchorage in the surrounding bone compared to

traditional surfaces were not able to achieve in the past. Nowadays, short implants can deliver a good anchorage in situations with limited bone height.

Are there limits for this implant and could it be a good alternative to avoid vertical augmentaprocedure because of insufficient bone width.

Alternatively, in the sinus area, in cases of soft bone, it would be difficult to get a good anchorage with a short implant. The healing time needs to be increased and implant loading delayed to ensure an undisturbed osseointegration process.

"...Nowadays, short implants can deliver a good anchorage in situations with limited bone height..."

smoother type of surfaces. This property is key for making the use of shorter implants possible. Previous studies have shown that short implants with 10mm or less had a lower rate of osseointegration and lower clinical success, but we don't see the same in implants with medium-rough surfaces.

I think advances in implant surface technologies offer the kind of anchorage that implants with more

Most publications describe the use of the short implants primarily in the posterior region. Short implants help in the maxilla to avoid sinus lift augmentation, while in the mandible they help to avoid vertical ridge augmenta-

A challenge could be a patient requiring a short implant owing to reduced bone height, but who still needs an additional augmentation

Do you have any additional comments about short implants?

As implant technology progresses, I expect to see more innovative solutions which provide less invasive, less costly and more straightforward type of treatments. I believe such progress is in the interest of the dentist, the patient and the industry.

Thank you very much for this interview. ↔

Resonance frequency analysis of dental implants placed with simultaneous sinus floor elevation

Preliminary results of an ongoing prospective study at the University of Bern announced

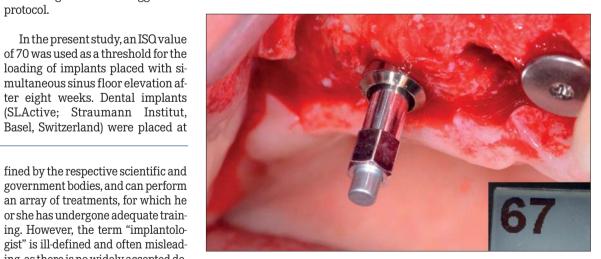
■Timing is a critical factor for the loading of dental implants. In the 1980's, the conventional loading protocols were rather conservative utilising 3 to 6 months of healing. Since the mid 1990's, implant dentistry has made substantial progress with improved, micro-rough implant surfaces. As a result, the loading protocols were continuously reevaluated and adjusted to offer patients shorter healing periods.

To choose the appropriate time point for loading, however, requires an objective methode to measure implant stability at various time

points. In the past 10 years, resonance frequency analysis (RFA) has become the method of choice for this examination. Using the 3rd generation of this RFA device (Osstell), a small metal pin (SmartPeg) is firmly inserted into the implant to allow the measurement of the Implant Stability Quotient, called ISQ value. The higher the ISO value the better the implant stability.

RFA was used at the Department of Oral Surgery and Stomatology in Bern since 2004 to determine ISO values of implants. They were placed in healed sites in the posterior mandible and measured after three weeks healing. (Bornstein et al. CIRR. 2009). After 21 days of healing, 95.6% of the implants reached the threshold value, and thus, could be loaded on the same day. The 6-month results showed no early failures using this rather aggressive protocol.

In the present study, an ISO value of 70 was used as a threshold for the loading of implants placed with simultaneous sinus floor elevation after eight weeks. Dental implants (SLActive; Straumann Institut, Basel, Switzerland) were placed at sites, which were vertically augmented with a composite graft of locally harvested bone chips and deproteinized bovine bone material (Bio-Oss®, Geistlich Biomaterials, Wolhusen, Switzerland). ISQ values were determined at implant placemax 84), and 74 at 8 weeks (min 58; max 83). In 69.6% of all implants, the ISQ increased over the 8 week period (median 9; min 1; max 28). In 14.3% of all implants, the ISO decreased within 8 weeks (median -3; min-1; max-6). Two implants



today «page 2

The Dental Council of Ireland currently does not recognise the term "implant specialist". Does dental implantology need to be an independent specialty?

This is a very hot topic, which was also extensively debated in the latest consensus workshop in Budapest. Indeed, the Irish dental council is not alone in this, as the vast majority of dental boards have not recognised implantology as an independent dental specialty. The American Dental Association, for example, has repeatedly rejected applications by various bodies to recognise implantology as a new specialty.

The consensus workshop has also adopted this position and does not

see any need for implantology as a new specialty. I cannot reveal any details, as the detailed position paper will be published in early 2014, but the consensus is that implant dentistry is a multidisciplinary treatment modality that at present does not fulfil many critical requirements for recognition as an independent specialty.

Unfortunately, the truth is that many clinicians and societies are selfproclaimed implantologists or implant specialists, thus implying a specialist status. An established specialist, for example a periodontist, is someone who has completed an accredited three-year full-time programme, has achieved specific knowledge and competencies as degovernment bodies, and can perform an array of treatments, for which he or she has undergone adequate training. However, the term "implantologist" is ill-defined and often misleading, as there is no widely accepted description as to what an implantologist is (competencies, scope of practice, etc.), nor any structured educational pathway defined for someone to reach such a status. So I think the consensus among university lecturers of implant dentistry will agree with the Irish dental council and will discourage the use of the terms "implant specialist" and "implantologist" in any

Thank you very much for the interview. ↔

ment and eight weeks later. Implants reaching ISQ values ≥70 underwent final restoration. Implants with ISQ values < 70 were reevaluated in a 4 week interval, until they reached the threshold.

The preliminary results reported here are based on 82 dental implants placed in 37 female and 34 male patients.81.2% of the implants reached ISQ values ≥ 70 at the 8 weeks time point. The median ISQ value of all implants was 69 at baseline (min 37; dropped below ISQ 70 and regained stability after additional four weeks of healing. One implant required 16 weeks to reach an ISO value \geq 70. Within the current observation period (since 01/2012) no implant was

The results suggest that the RFA technique is an effective method to measure implant stability objectively, and to help reduce the time to load for implants placed with simultaneous sinus floor elevation. ◀



What's on Friday & Saturday, 18 & 19 October, 2013

(Concert) Date and time: 18 October, 19:30 Venue: The Olympia Theatre, 72 Dame Street www.olympia.ie

During the month of October, Lawson's Everywhere We Go Tour

is taking the London band to 14 locations across Ireland and the UK, including The Olympia Theatre in Dublin. Among other achievements, they have held three Top 10 chart positions, selling over half a million singles in the UK. Their debut CD Chapman Square reached gold status and the Top 5 in the of-

Róisín O

(Music) Date and time: 18 October, 20:00 Venue: Whelan's, 25 Wexford Street www.whelanslive.com

Born into a family of Irish singers and songwriters, this 24-year-old Irish rose has taken the local music



scene by storm. Her debut album The Secret Life of Blue reached No. 21 on the official Irish Albums Chart when it was released in September 2012. Among other collaborations, she supported Lionel Richie on his Ireland tour last year. Whelan's pub at Wexford Street, which is also fea-

(DTI/Photo courtesy of Darragh Genockey,

tured in the music video for her single "How Long", is hosting her concert tonight.

Leinster Rugby vs. Castres Olympique

(Rugby) Date and time: 19 October, 15:40 Venue: RDS Arena www.rds.ie



(DTI/Photo courtesy of Eoghan McNally, Ire-

While rugby is generally believed to have been invented by an Englishman, a similar sport was played long before in Ireland in the form of caid and Gaelic football. With four teams, the country currently has the most teams after Wales playing in the Pro12 league, which was established from the former Celtic League. On Saturday, last year's champion Leinster Rugby will be facing off this year's winner of the highest French rugby division from Castres at a Heineken Cup match at the RDS Arena.

Guinness Storehouse

(Sightseeing)

Opening times: All week, 9:30-17:00 Venue: Guinness Storehouse, St James's Gate

www.guinness-storehouse.com

No visit to Dublin is complete without having visited the Guinness Storehouse, which tells the genuine history of Ireland's most famous brewery. A former fermentation plant, the building was reconstructed in the late 1990s in the shape of a pint. The Gravity Bar on top, resembling the characteristic creamy head, not only provides visitors with a magnificent 360-degree view of Dublin, but also gives out a free beer to admission ticket holders.



(DTI/Photo courtesy of Sergei Vinarey, Russia)

ficial UK album charts.







Dublin's Top 10



1. HOP ON A CITY TOUR...

Exploring a city is a beautiful thing. Sitting on a bus for two hours. not so much. That's why the Hop-on/Hop-off tours offered by Dublin Bus and City Sightseeing are such a brainwave. Stopping at multiple attractions around the city (think Dublin Zoo, Trinity College, the $\,$ Guinness Storehouse), customers are free to hop on and off at their leisure. That means exploring your own interests, at your own pace, in your own sweet way. But there's more. Quality guides are on hand $% \left(1\right) =\left(1\right) \left(1\right)$ to offer entertainment and insight, multilingual audio commentary is available, kids go free on certain special offers, and tickets last for 48 hours, meaning you can pick up where you left off the following day.

2. ENJOY THE FREEDOM OF THE CITY...

Their contents are priceless, but entry to Dublin's top museums and galleries is free. Just think about the possibilities. That means you could skip from bog bodies at The National Museum of Archaeology to canvases by Caravaggio and Jack B Yeats at the National Gallery. You could check out four centuries of furnishings at The National Museum of Decorative Arts and History, before visiting Francis Bacon's reconstructed studio at Dublin City Gallery The Hugh Lane. Seven thousand items were meticulously transplanted here from $% \left(1\right) =\left(1\right) \left(1\right$ Reece Mews in London, including books, brushes and, erm, several pairs of corduroy trousers. "I feel at home here in this chaos," Bacon once quipped. It's a world of riches that won't cost you a cent.

3. VISIT DUBLIN'S ANIMAL KINGDOM.

Over a million visitors pass through the gates of Dublin Zoo every $% \left\{ 1,2,\ldots ,n\right\}$ year, and there are just as many reasons to join them. Tucked away in Phoenix Park, the zoo is constantly welcoming new arrivals – baby gorillas, hippos, rhino and red pandas to name but a few. Adult attractions include Harry, a 40-stone silverback lording it over the Gorilla Rainforest (he's watching you). Habitats range from the sweeping African Plains to a free-flying aviary, a family farm and lots of playgrounds. Modern principles of conservation, education and animal care govern everything and, yes, that includes the humans The keepers at Dublin Zoo are walking, talking encyclopaedias. Throw

4. PLAY KING OF THE CASTLE...

You want castles and cathedrals? Dublin has you covered. Take Malahide Castle, home to an amazing banqueting hall, a mischievous ghost named Puck and one of the best playgrounds in the country. Take Dublin Castle, dating from 1204AD and still central to the undercroft is essential here, but don't miss the Chester Beatty Museum and its excellent Silk Road Café, with Middle Eastern, North African, Mediterranean and vegetarian dishes. Dublin is also unique in boasting two landmark cathedrals within a short walk of each other-St Patrick's, where author and satirist Jonathan Swift famously served $\,$ as Dean, and Christ Church, a chandelier of a building containing the bones of Strongbow.

5. DRINK A DROP OF DUBLIN...

You can't visit Dublin without tasting Guinness. Or better still, go the whole hog at the home of the black stuff. The state-of-the-art Guinness Storehouse, located beside the famous brewery at St James Gate, wraps several floors of exhibitions and advertising displays around a pint-shaped atrium. You can even learn how to pour the perfect pint (tip: leave it settle for 119.5 seconds) before drinking in 360-degree views of Dublin from the Gravity Bar. Afterwards, enjoy another drop of Dublin on a tour of the Old Jameson Distillery in Smithfield, where you can learn about the triple distilling process before taking a tutored sup of the nectar itself. Sláinte!

Dating from 1796, Kilmainham Gaol was famous as "a machine for grinding rogues honest". Or perhaps infamous is a better word.. the building stands empty today, but its thick walls, grim graffiti and foreboding atmosphere still evoke a shiver. Watch out for the striking Victorian wing, where scenes from Michael Collins and The Name of the Father were filmed; an AV presentation and guided tour further tease out the jail's place in Irish political and penal history. Robert Emmet, Charles Stuart Parnell and Eamonn de Valera were all imprisoned at Kilmainham, and the leaders of the 1916 Rising were executed by firing squad in the stone-breakers' yard. Yikes.

7. Browse the City of Words.

Dublin is one of just five UN ESCO Cities of Literature. The words $\,$ of Nobel laureates like Yeats, Shaw, Beckett and Heaney echo in its streets. Statues of writers stand in parks; their names have been given to bridges. Visitors can celebrate Joyce's Bloomsday, take a literary pub crawl and see the Book of Kells at Trinity College. Literary Dublin is even one of Patricia Shultz's 1,000 Places to See Before You Die. But don't let this tempt you into thinking it's all about dead guys. Contemporary writers like Joseph O'Connor, Anne Enright and Paul Murray continue to carry the flame, as indeed, do Dubliners themselves, every time they utter the immortal greeting: "What's the

8. POP INTO A PUB..

There's not much to say ABOUT Dublin pubs that hasn't already been said IN Dublin pubs. These trusty little tabernacles are famous for their creamy pints, cosy snugs and quick-witted craic. Think of Mulligan's, Kehoe's, Toner's or McDaid's, all dripping with character, all dotted about the city like time machines. "In Dublin, you're never more than 20 paces from a pint," author JP Dunleavy once said, But great grub; hotel bars are shaking up the cocktail scene; quality music, wine and coffee are mixing it up with flip-out fun in Temple Bar. Whatever your taste, there's a Dublin pub for you.

9. OPEN DUBLIN'S DOORS...

Paris has its beaux arts. Dublin has its Georgian streets and squares Beaming out from beneath their fanlights, these brightly-painted doors are an iconic image of the city. But where did they come from The answer lies between 1714 and 1830. In this period, four different Georges held the throne of England, Dublin entered an era of prosperity, and its medieval streetscape got one hell of a makeover Grand buildings such as the Custom House, stately spaces such as $\,$ Stephen's Green and sumptuous interiors like those at the Georgian House Museum are just some of the results on view today. Download a Georgian iWalk, and experience the "gorgeous eighteenth" for

10. CITY BY THE SEA..

With so much to do in the city centre, it's easy to forget that Dublin is a city by the sea. But a short ride on the Dart is all it takes to get out along its sparkling necklace of seaside villages and beaches. Within half an hour you could be bobbing along in a small boat on the way to Dalkey Island, eating Michelin starred food in Malahide, or walking the Victorian pier at $\operatorname{\mathsf{Dun}}\nolimits \operatorname{\mathsf{Laoghaire}}\nolimits.$ Double that, and you might find yourself eating snap-fresh seafood in Howth, building sandcastles on Portmarnock's "Velvet Strand", or winding your way down wildflower strewn cliff paths to White Rock beach in Killiney. Dublin Bay even has its own resident dolphins. How many capital cities can say that?

DUBLIN, COME JOIN THE 2013 PARTY!

The best part about any visit to Dublin is choosing what to do! And we have every kind of activity imaginable to keep you busy but Dublin doesn't stop there – we have a host of events that celebrate a nyriad of unique aspects of Dublin. From traditional music, theatre dance and fashion, to national celebrations, start planning your visit! To plan your visit and events see visitdublin.com/events

iempie Bar Trad Fest	22nd – 27th January
lameson Dublin International Film Festival	14th – 24th February
St. Patrick's Festival	14th – 18th March
Irish Fest	14th – 18th March
Dublin Bay Prawn Festival	24th – 28th April
International Dublin Gay Theatre Festival	6th – 19th May
Dublin Street Performance World Champions	ship 12th – 14th July
Dublin Rock 'n' Roll Half Marathon	5th August
Dublin Horse Show	7th – 11th August
Dublin Fashion Festival	5th – 8th September
Festival Season	1st Sept – 31st October
Hard Working Class Heroes	3rd – 5th October
NYE Festival	31th Dec – 1st January













Useful information

Opening hours of the exhibition

Thursday, 17 October: 9:00-19:00 Friday, 18 October: 8:30-19:00 Saturday, 19 October: 8:30-14:00

On-site registration

The welcome desk is located at the entrance. Here you can register and/or collect your congress badge. The normal fee for attending the congress is €770, which includes admission to all congress sessions, poster areas, the exhibition and the opening ceremony. Special rates apply to $members\,of\,the\,EAO\,and\,national$ societies, including the Royal College of Surgeons in Ireland, the Prosthodontic Society of Ireland, the Irish Society of Periodontology and the Oral Surgery Society of Ireland, as well as undergraduate students who present valid identification. Pavments can be made in cash, as well as by cheque or credit card (VISA and MasterCard).

Official language of the congress

The official language of the congress is English.

News and information

Dental Tribune International will provide round-the-clock independent coverage of this year's Annual Scientific Congress of the EAO through its print and online publications. A special daily edition of the today international congress newspaper will be distributed by hostesses outside the Convention Centre Dublin. For more news and updates, you can access the online newsfeed at www.dental-tribune.com or scan the QR code below with your mobile Internet-capable device.



Internet

Free Wi-Fi, provided by Bespoke Internet Solution, is available throughout the Convention Centre Dublin.

Banking and money

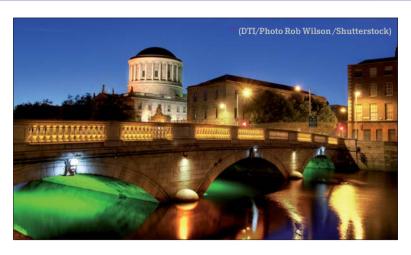
Although there are no ATMs within the Convention Centre Dublin, you can find plenty in the surrounding area. The Bank of Ireland, for example, maintains one of its branches in nearby Mayor Square, which is open from 8:30 to 16:00 during weekdays. A number of ATMs are also available at nearby convenience shops and retail stores, such as SPAR and MACE, both located in Mayor Street.

Food and beverages

The EAO will serve lunch and coffee for registered delegates inside the exhibition and the poster presentation area.

Tourist information

Located in Suffolk Street near Trinity College Dublin, the Dublin Discover Ireland Centre will help you with information on sights, tours and accommoda-



tion. You can also purchase a Dublin Pass there, which starts at €19 and gives you free access to 30 attractions in the Irish capital for a limited period, as well as a one-way trip to the airport by

The Centre can be also reached by phone at +353 1 605 7700.

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AD

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We welcome you to our booth at EAO in Dublin, where you can see live demos, try our products and much more.

Booth S21











Dental Campus

This case study is the first in a series of articles designed to introduce dental professionals to Dental Campus, a new e-learning platform for implant dentistry. Unlike other online learning tools, Dental Campus has a structured and innovative design, is strongly practice-orientated, and allows for interactive communication. Online lectures provide you with upto-date expertise and help you to plan cases of varying difficulty levels. Each of the lectures is linked to corresponding implant-specific product information to enable rapid transformation of your new knowledge into practical treatment expertise. Through the case presentations, ranging from simple to advanced, you have the opportunity to follow the clinical procedures in detail and discuss the case in Dental Campus forums with your colleagues. All the relevant treatment steps are presented and demonstrate a range of treatment options step-by-step.

The quality of the content on Dental Campus is constantly assured by the Implant Campus Board, whose members include internationally recognised experts. For more information and cases, you an also www.dental-campus.com.

Revision of an unaesthetic reconstruction

Case planning and structured continuing education using the new Dental Campus e-learning platform

By Dr Birgit Wenz, Dr Sven Mühlemann & Andreas Graf, Switzerland

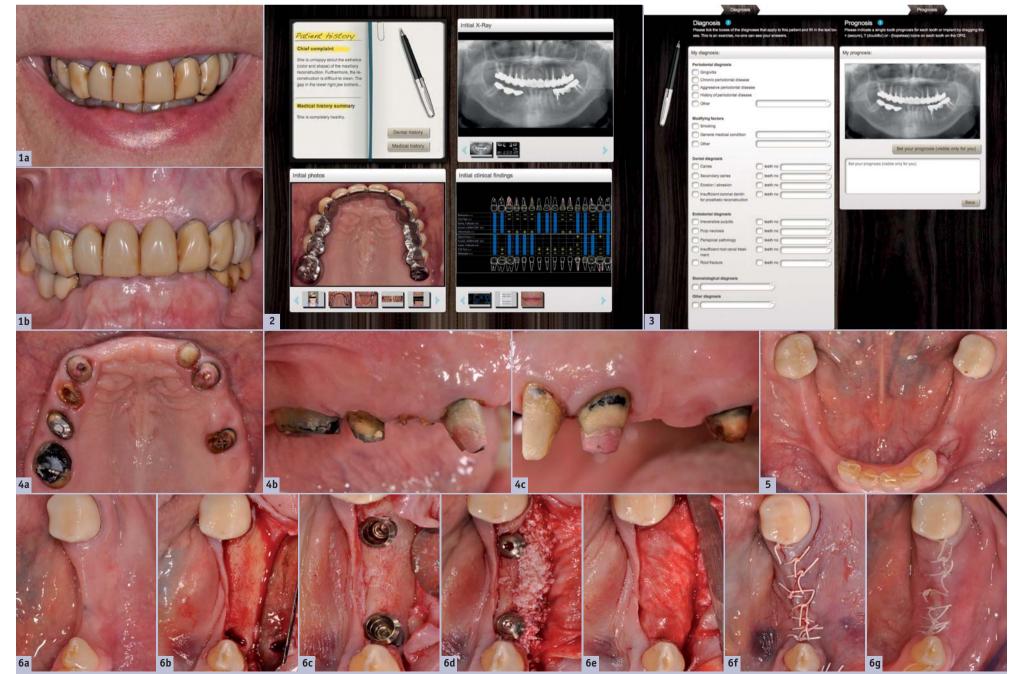
■ Has the following happened to you? You recently attended an excellent continuing education course, but when you wanted to apply the acquired knowledge, you realised that you lack the necessary practical skills. Created especially

for implant dentistry, the new elearning platform Dental Campus seeks to address this gap. It is practice-oriented and offers important theoretical, technological and product-related details from one single source. The learning modules can also be individually combined to meet specific needs.

In addition to online lectures by world-renowned experts, a key feature of the Dental Campus platform is the presentation of clinical cases. Each case presentation realistically simulates the clinician's situation when planning a case on his office desk. All cases are structured in the same way, beginning at the initial findings to diagnosis, prognosis and planning through the treatment se-

quences and the final check-up. Users are given a wealth of information, as shown in the following demonstration case, which is also available free on Dental Campus.

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^ Figs. 1a & b: Clinical images of the initial examination. ^ Fig. 2: Dental Campus screenshot of initial findings. In addition to clinical images, the user has simultaneous access to X-ray and clinical findings as well as other relevant patient information. The presentation simulates the practitioners desktop view. ^ Fig. 3: Users can create their own diagnosis and tooth prognosis on screen, then compare with those of the treating dentist. ^ Figs. 4a-c: Clinical situation after bridge removal. ^ Fig. 5: Clinical situation after extraction of left mandibular abutment tooth. ^ Figs. 6a-m: Clinical situation during implant insertion and bone augmentation, including X-ray.





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