

# CAD/CAM

international magazine of digital dentistry

4<sup>2017</sup>

## interview

“Dentistry has finally arrived in the digital age”

## case report

Screw-retained implant-supported restoration  
in the edentulous maxilla

## cone beam supplement

Dynamic navigation for reliable  
and predictable flapless implant placement

**dti** Dental  
Tribune  
International



# Essential Dental Media

Dental Tribune International

# The World's Largest News and Educational Network in Dentistry

[www.dental-tribune.com](http://www.dental-tribune.com)

**dti** Dental  
Tribune  
International



Magda Wojtkiewicz

# Welcome to the digital age!

"The world's largest taxi firm, Uber, owns no cars. The world's most popular media company, Facebook, creates no content. The world's most valuable retailer, Alibaba, carries no stock. And the world's largest accommodation provider, Airbnb, owns no property. Something big is going on." These words have been said by Tom Goodwin, an executive at the French media group Havas in 2015 and has been doing the rounds since. Obviously he was right, "something is going on", although making these observations, he meant the companies that control the interface between the consumer and the provider of the goods or services, I guess we can put them in a different context as well: the world is changing very quickly today, including the world of dentistry.

Analogue versus digital workflow. Can CAD/CAM replace skilled ceramists? Can we donate our smile to somebody else? Will digital impressions eliminate the conventional ones? What if the digital cloud crashes and loses our digital storage? We try to give you the answers to these and many more similar questions in **CAD/CAM magazine**.

In this edition, you will find articles on practice management, digital workflow, CAD/CAM assisted treatment and treatment planning. Dr Simon Chard from UK describes his experience with CEREC and implant restorations, while Drs Richard Zimmermann and Stefanie Seitz from the US explain principles and advantages of implant insertion through the DWOS Synergy workflow. Dr Torsten Seidenstricker and Dominique Vinci (Switzerland), in an amazingly illustrated article, present symbiosis of different procedures and materials on an example of zirconium dioxide and fluorapatite glass-ceramic. In the **cone beam supplement**, Dr David Burgess (UK) demonstrates how useful dynamic navigation can be, especially for flapless implant placement.

I hope you will find this issue interesting, enjoy it and get ready for an exciting New Year 2018, as there will surely be a lot of innovations to write about.

Magda Wojtkiewicz  
Managing Editor



| **editorial**

- 03 **Welcome to the digital age!**  
Magda Wojtkiewicz, Managing Editor

| **practice management**

- 06 **Don't blink—You may miss something!**  
Chris Barrow

| **feature**

- 10 **“Dentistry has finally arrived in the digital age”**  
An interview with Patrick Thurm, Vice President  
Technology Global Prosthetic Solutions, Henry Schein

| **case report**

- 12 **Implant restoration with CEREC**  
Dr Simon Chard
- 16 **Implant insertion through the DWOS Synergy workflow**  
Drs. Richard Zimmermann & Stefanie Seitz
- 20 **Screw-retained implant-supported restoration in the edentulous maxilla**  
Dr Octavian Fagaras & Milos Miladinov
- 26 **A convincing duo: Zirconium dioxide and fluorapatite glass-ceramic**  
Dr Torsten Seidenstricker & Dominique Vinci

| **industry report**

- 32 **Combined CAD/CAM-assisted treatment, for a new, beautiful smile**  
Dr Marko Ahonen

- 36 **Rehabilitation of the edentulous maxilla—digital approach**  
Dr Francesco Benvenuto & Giorgio Poma

| **cone beam supplement**

- 42 **Dynamic navigation for reliable and predictable flapless implant placement**  
Dr David Burgess
- 48 **A whole new dimension of imaging precision**  
Julia Maciejek

| **industry news**

- 52 **Manufacturer news**

| **opinion**

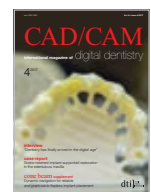
- 54 **Digital Workflow: a precise way to achieve state of the art smiles**  
Dr Miguel Stanley
- 58 **Teeth within an hour: A ticking time bomb**  
Dr Göran Urde

| **meetings**

- 60 **EAO meeting in Madrid**
- 62 **MIS Global Conference**
- 64 **International Events**

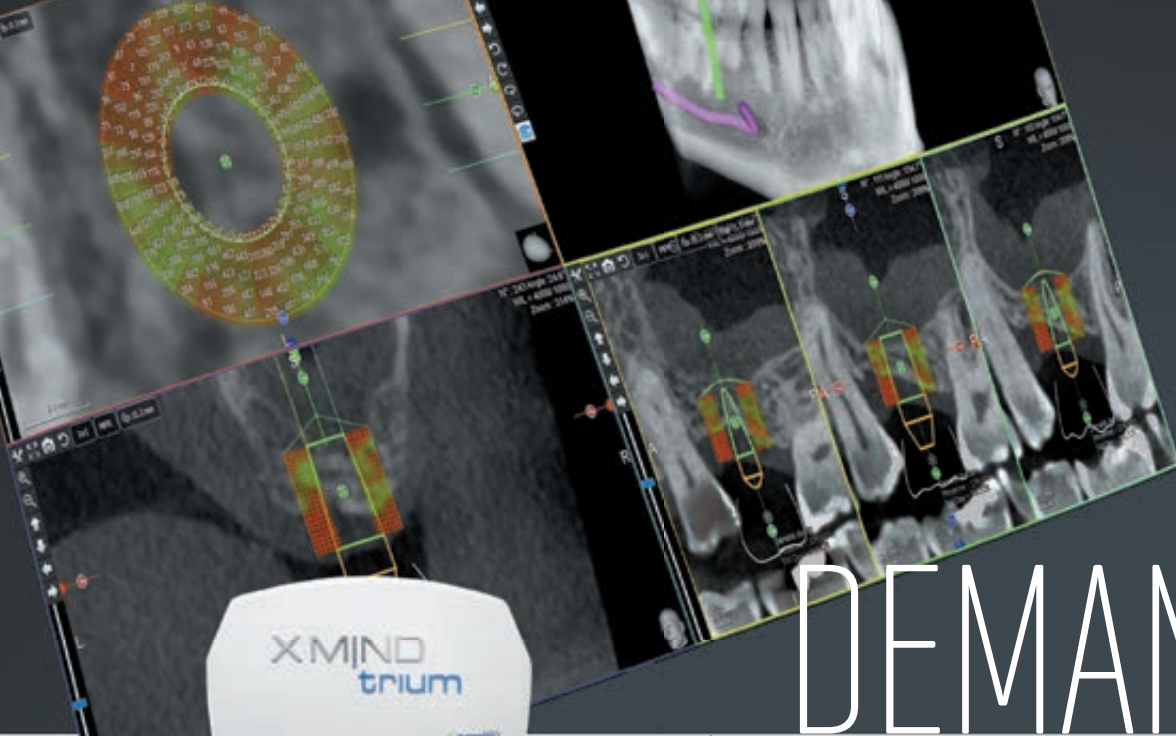
| **about the publisher**

- 65 submission guidelines
- 66 imprint



Cover image courtesy:  
© MarinaGrigorivna/  
Shutterstock.com





# I AM DEMANDING



Mac

WINDOWS®  
COMPATIBLE



## X-MIND trium

### 3D technology that facilitates implant planning with instant volume measurement and bone density assessment

- Evaluate in one click the volume and bone density
- Increase your success rate with a 75µm resolution
- Focus on the region of interest with a wide range of fields of view
- Simplify implant planning with only one software
- Provide more accurate diagnosis thanks to high-detail imaging
- Obtain a full and illustrated report in less than one minute
- Bring a safer therapeutic implementation, less traumatic and less stressful
- Reduce complications related to implant placement
- Allow your patient to visualize the therapeutical recommendation
- Control the dose of X-ray emitted

# Don't blink— You may miss something!

**Author:** Chris Barrow, United Kingdom



Staying in touch with patient expectations is arguably the single most important way to survive the future.

I recently took five weeks off work to go catamaran sailing in the Caribbean, get married while there and then leave my lovely new wife behind to explore the mountains and deserts of Oman with seven friends. On my return, the back issues of dental magazines were full of General Dental Council changes to its regulatory systems, the National Association of Specialist Dental Accountants and Lawyers revealing a 53 per cent increase in UK practice goodwill values in the last year, my dentist taking a break from practice purchases, the FGDP (UK) seeking independence, the risk that NHS dental contract reform could force associates to become employees and Simplyhealth announcing their name change for Denplan. Add in the Bupa purchase of Oasis before I started my wanderings and the rise and rise of digital dentistry and we have what can safely be described as a rapidly changing and disruptive marketplace.

Predictions are a dangerous game. I have been asked to submit prophetic articles on many occasions in the past. Perhaps unusually (because I am wired that way), I have always made a point of returning to

the predictions some years later, just to see how close I came to getting things right. I am delighted to tell you that I have maintained an average score of 50 per cent on my guesses as to what may happen next.

The challenge, as they say, is knowing which 50 per cent and, frankly, I never have a clue. Sorry! So my purpose here is not to add yet another list of half-truths to the speculations of my peers in writing and speaking; I would rather offer some thoughts on how to survive the disruptive dental market.

## **Rule 1: Stay focused on the patient**

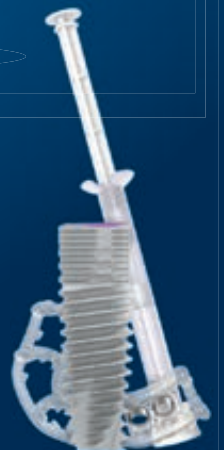
No matter what big business, private equity or shareholder pressure does to the dental industry, the independent dental business owner will be able to deliver a unique selling point built on customer service. The patient experience will always be the way in which you can positively differentiate yourself. Staying in touch with patient expectations is arguably the single most important way to survive the future.



## INSPIRING SPEAKERS. BREATHTAKING VIEWS MAKE IT SIMPLE

MIS is proud to introduce the Global Conference Speakers Team: • Yuval Jacoby • Ignacio Sanz Sánchez • Vincent Fehmer • Emilio Arguello • Eric Van Dooren • Galip Gürel • Mauro Fradeani • Christian Stappert • Myron Nevins • Joseph Kan • Edward P. Allen • German O. Gallucci • Lesley David • Stefan Koubi • Leila Jahangiri • Carlo Marinello • Ariel J. Raigrodski • Mirela Feraru • Tali Chackartchi • Tommie Van De Velde • Pablo Galindo-Moreno • Stavros Pelekanos • Juan Arias Romero • Víctor Clavijo • Anas Aloum • Gustavo Giordani. To learn more about the conference visit: [www.mis-implants.com/bahamas](http://www.mis-implants.com/bahamas)

MIS®





In a recent blog post, I mentioned a presentation given at the London-based WIRED Retail symposium. There Westfield Labs Chief Operating Officer Antony Ritch gave an interesting insight into the future of shopping: "Shoppers don't differentiate between online and offline. Omnichannel is the only way that retailers can survive. As virtual reality, augmented reality and full-body scans of shoppers proliferate—and with Amazon launching bricks and mortar stores, the way forward is to act as matchmaker between customer and product in every environment. Shoppers always have their phones and 80 per cent of all physical sales are influenced by the internet. Stores are a social environment where friends and family come out to enjoy a day of shopping, dining and entertaining. We see the digital world in the same manner."

When one considers this quotation alongside the conventional approach to the provision of dental customer service, there is much that will need to change in the next ten years. My belief is that disruption will be applied to the premises from which dentistry is delivered and the current model of reception, lounge, consultation room and surgery.

The patient experience will change and the device-toting, connected consumer will be at the centre of it. Something new this way comes, but as yet I am having trouble imagining what it will look like.

### Rule 2: Take the time to research, listen and plan

There seem to be too many dental conferences, websites, publications and social channels. There are nowhere near enough hours in the day to stay abreast of what is happening in clinical dentistry and in business innovation. I have no miracle cure for information overload. If you are committed to your vocation, then you must prioritise that which will keep you ahead of the game and that will include attending, listening to, watching and reading the events, broadcasts and publications that will maintain your edge.

This comes at a price and the need to manage your time very carefully to avoid burn-out. Maria Popova, creator of the excellent Brain Pickings weekly e-newsletter, reminds us that: "Of all ridiculous things, the most ridiculous seems to me, to be busy—to be a man who is brisk about his food and his work; Kierkegaard admonished in 1843 as he contemplated our greatest source of unhappiness. It's a sobering sentiment against the backdrop of modern life, where the cult of busyness and productivity plays out as the chief drama of our existence—a drama we persistently lament as singular to our time. We reflexively blame on the Internet our corrosive compulsion for doing at the cost of being, forgetting that every technology is

a symptom and not, or at least not at first, a cause of our desires and pathologies."

### Rule 3: Have good conversations

All problems exist in the absence of a good conversation. Many years ago, one of my original mentors advised me to establish a personal board of directors (PBD), defined as people whose opinion I trust and who have the opportunity to give me honest feedback without judgement. The only qualifications are trust, respect and mutual admiration. They do not have to be in the same business, country or demographic. My PBD has changed over the years as members have come and gone, but I still refer many of my ideas and strategies to them for a second opinion before I take risks.

I often attend meetings with owners, managers and teams in which it is obvious to me that the main reason they have progressed so slowly is that they simply do not make the time available in the working calendar to stop and listen to each other. The chase for production becomes all-embracing, whether a unit of dental activity or a sales target, and there are never enough timeouts to take the pulse of the business and its people.

The main characteristic of a Champions League dental business (if I may use that football metaphor) is the meeting schedule, which should be designed to ensure that verbal communication is the primary means by which information is shared. Here too is another way in which the independent can beat most big businesses.

Benjamin Franklin is alleged to have said, "When you're finished changing, you're finished". Focus on your patient experience, stay connected to innovation and stop to listen. Master those three habits and you will be able to take advantage of whatever the world plans to throw at us next. There is, of course, a 50 per cent chance that what I have just said is correct.

*Editorial note: This article first appeared in Dental Tribune United Kingdom Edition 2/17.*

### contact



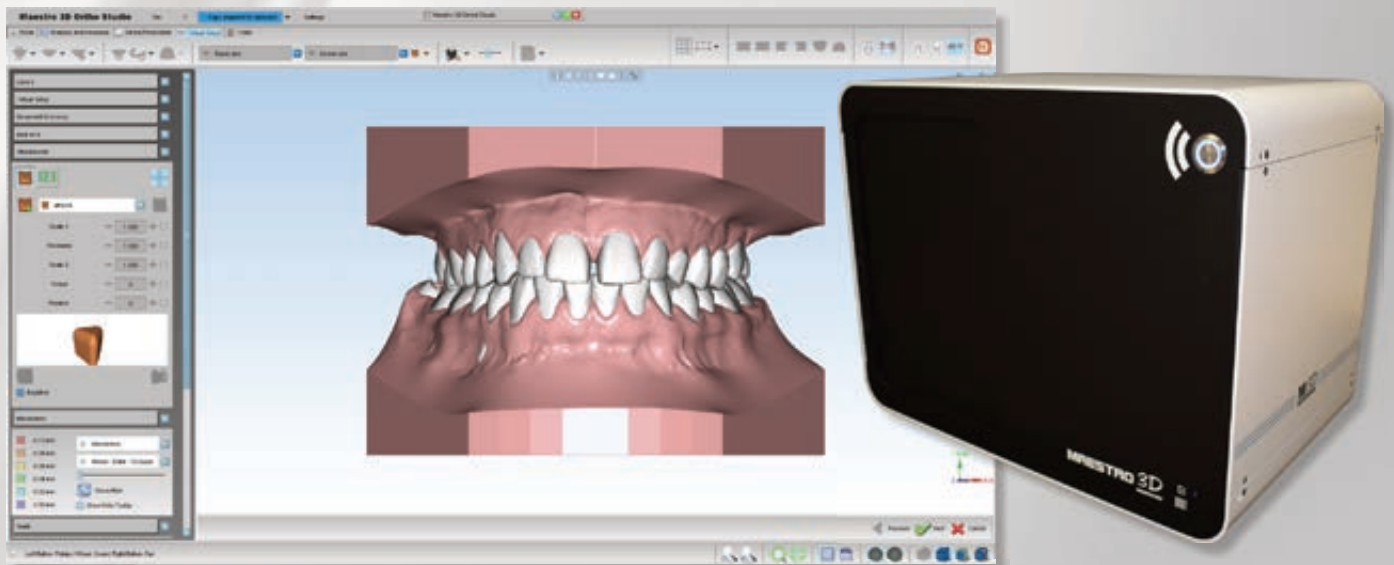
**Chris Barrow** is the founder of Coach Barrow consultancy practice. An active consultant, a trainer and a coach to the UK dental profession, he regularly contributes to the dental press, social media and online. Chris Barrow can be contacted at [coachbarrow@me.com](mailto:coachbarrow@me.com).



# Maestro 3D DENTAL System

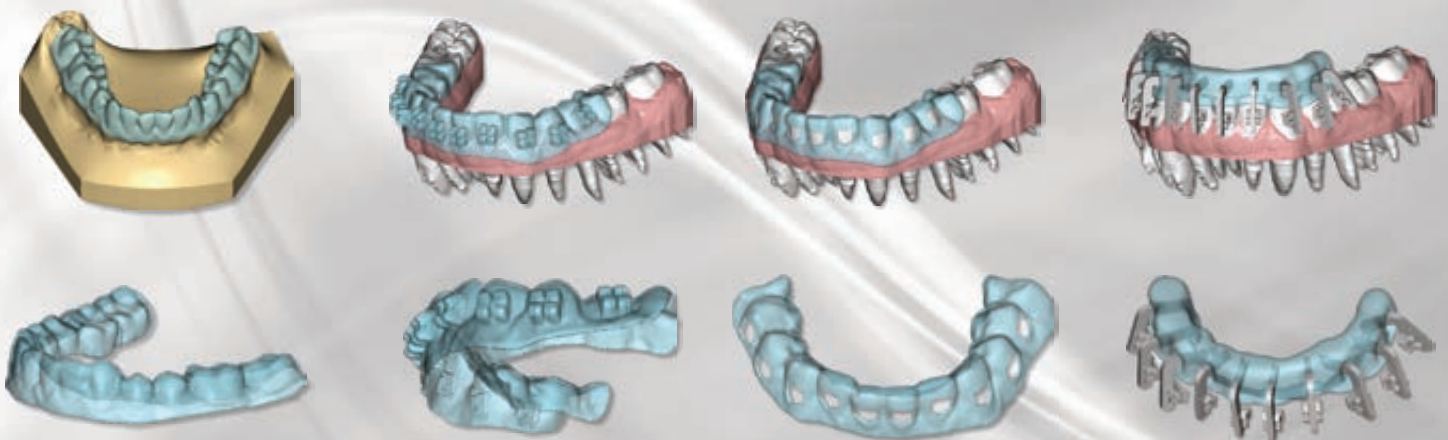
Innovative solutions for dental applications

[www.maestro3d.com](http://www.maestro3d.com)



**OPEN 3D DENTAL SCANNER**

**Dental Studio software**



[www.maestro3d.com](http://www.maestro3d.com)