

roots

international magazine of endodontics



CE article

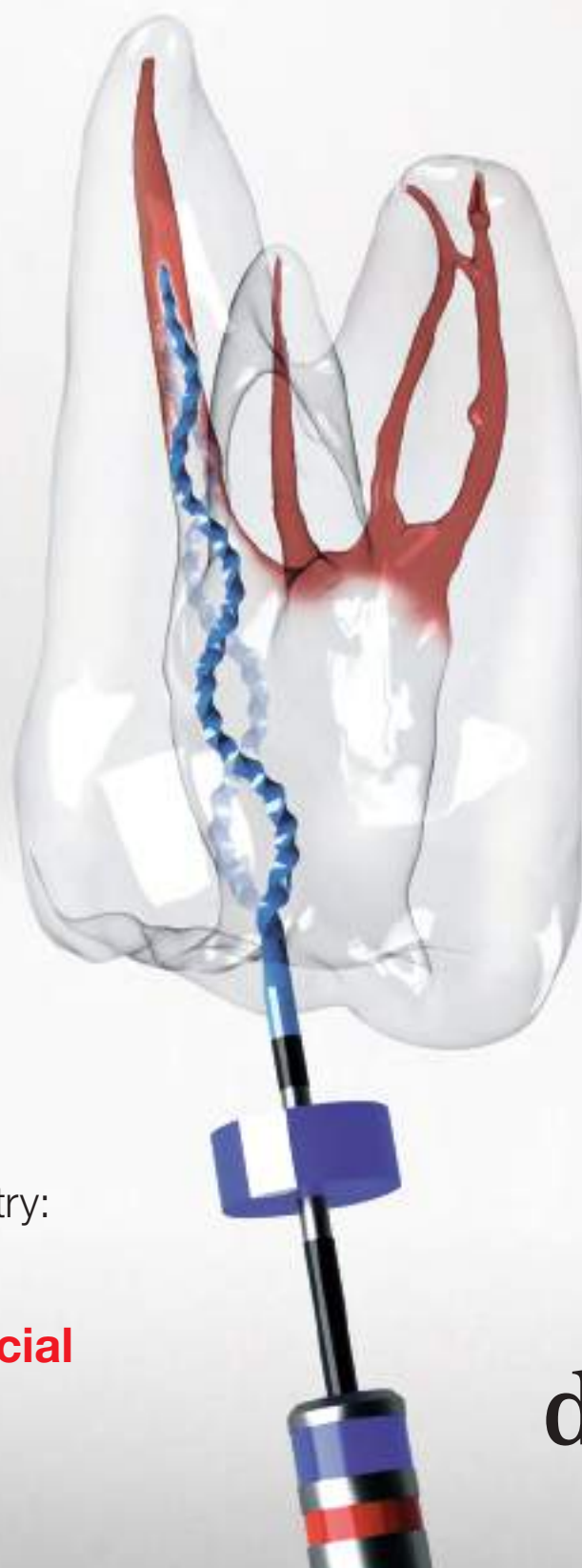
The dental operating microscope in endodontics

trends & applications

Bioactivity in restorative dentistry:
A user's guide

ROOTS SUMMIT special

Lecture programme, abstracts
and speaker information





GPR

Gutta Percha Remover

-Breakthrough in Endodontic Retreatment-

Fast and effective gutta-percha removal.
Stress-free without torque control, reversal setting & requiring no solvents!

Simple steps, easily done.

Contact MANI for more information:
www.mani.co.jp/en
dental.exp@ms.mani.co.jp

MANI®
FOR ADVANCED TREATMENT

Stephen Jones

Guest Editor
Co-Chairman of the ROOTS SUMMIT



Dear readers and friends,

Welcome to ROOTS SUMMIT 2018! We are delighted to be in historic Berlin in Germany and to be hosting our meeting in the European School of Management and Technology (ESMT). This majestic building was the headquarters of the former German Democratic Republic State Council. The imposing architectural aesthetics of the building are spectacular. After the great success of ROOTS SUMMIT 2016 in Dubai, this year's edition could not have found a more ideal location.

When introduced to ESMT, I was pleased to find that their focus is on three principles: leadership, innovation and analytics. These items have also been very much part of the DNA of ROOTS for the past 20 years. We are pleased to be able to have our event in a school setting that reflects our ideals too.

Leadership is shown by the over 50 countries represented at this meeting, guided by their top opinion leaders and most forward-thinking endodontists and dentists.

Innovation is what people are seeking whenever they attend a continuing education course, innovation in terms of treatment planning, visualisation, irrigation protocol, instrumentation, filling techniques, etc.

Analytics are key to any successful treatment and something that all ROOTS members take very seriously. Analysing what to do, what equipment to use, single appointment versus multiple, restorative options, etc. is a critical component in treating patients. The fact that ROOTS members confer with each other globally 24 hours a day speaks volumes to how seriously everyone attending the ROOTS SUMMIT regards the subject of planning endodontic treatments.

Dr David E. Jaramillo has organised a topical and relevant meeting with an extremely high level of scientific relevance. Our impressive list of some of the world's leading endodontic speakers will translate the science

to how it can benefit you by benefiting your patient. As is always the case at a ROOTS SUMMIT, we have speakers from multiple countries and backgrounds, including a mix of academia, education and clinical practice. In addition to the ten speakers David has organised for us, Dr Freddy Belliard has scheduled 17 diverse and unique hands-on workshops, some of which sold out well in advance of the SUMMIT.

To many participants, the highlight of a ROOTS SUMMIT is viewing the poster and case presentations submitted by their fellow members of the ROOTS Facebook group. Both of these competitions will take place on 29 June. We received an enthusiastic response and a very high level of submissions to participate in this part of the programme. David has narrowed it down to ten posters and ten presentations. Over the years, several of our main-stage speakers have come from this segment of the programme.

The entire programme, especially the hands-on workshops, would not be possible without the generous and unconditional support of our sponsors. Please spend some time talking to these kind people who support ROOTS on an ongoing basis and help make this meeting possible. You will be among some of the best and most knowledgeable people marketing endodontic products anywhere in the world, so please make good use of your time with these valuable partners. They are a great resource for knowledge and technique information. You will be surprised how much they also have to teach you.

We will have a very busy, interesting and extremely educational few days in Berlin. Thank you for joining us at ROOTS SUMMIT 2018!

Stephen Jones
Guest Editor
Co-Chairman of the ROOTS SUMMIT



page 16



page 36



page 50

Cover image courtesy of
FKG Dentaire (www.fkg.ch)



editorial

Dear **readers** and **friends**
Stephen Jones (Guest Editor)

03

ROOTS SUMMIT special

Lecture programme, **abstracts** and **speaker** information

06

CE article

The dental **operating microscope** in endodontics
Dr Frank C. Setzer

16

research

Nd:YAG **laser-assisted removal** of instrument fragments
Dr Georgi Tomov

22

technique

Cutting **endodontic access** cavities—for long-term **outcomes**
Dr L. Stephen Buchanan

24

trends & applications

Bioactivity in restorative **dentistry**: A user's guide
Dr Fay Goldstep

30

Hot **modified technique** with a new **biosealer**

Drs Alfredo Iandolo, Massimo Calapaj & Dina Abdellatif

36

case report

Bioactive materials for root canal **obturation**

Prof. Bogdan Shumilovich, Dr Vladimir Rostovtsev, Dr Lianna Adunts,
Dr Andrey Fonstein & Dr Eugeniy Stanislavchuk

40

Orthograde **apical application of an MTA plug**

Dr Angela Gusiyska

44

Long-term stable restoration of severely discoloured anterior teeth

Prof. Dr Daniel Edelhoff

50

Bisphosphonate-related **osteonecrosis of the jaw**

Drs Claudia Dib, Sara Salloum, Edgard Jabbour & Philippe Sleiman

54

news

manufacturer news

60

practice management

Successful **communication** in your **daily practice**

Part III: Millennial patients

Dr Anna Maria Yiannikos

64

tribute

"He brought a world of **enthusiasm** and **knowledge** to the global
endodontic community"

Fred Michmershuizen

66

meetings

International events

68

about the publisher

submission guidelines

69

international imprint

70

The universe at your fingertips.

● LightWalker

The highest technology dental laser system

Supreme clinical results:

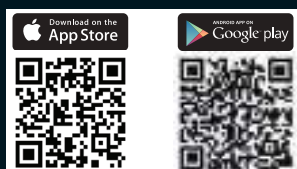
- TwinLight® Perio Treatments
- TwinLight® Endo Treatments
- No-sutures soft-tissue surgery
- Patient-friendly conservative dentistry
- Pre-sets for over 40 applications

Unmatched simplicity of use:

- Balanced and weightless OPTOflex® arm
- Nd:YAG handpiece detection system
- Quantum Square Pulse technology for fast minimally invasive treatments
- X-Runner™ - the first digitally controlled Er:YAG dental laser handpiece

Journey into a new dental experience with speed, precision and great results.

Visit www.fotona.com today!



✱ Fotona App



Hands-on courses

Thursday, 28 June 2018

9:00–10:30

Modern instrumentation of the root canal—
an introduction to the S1 reciprocation one file system
with the efficient, flexible and safe S1 Plus files
Speaker: Johan Ohlin/Sponsor: Sendoline AB

Impact of the dental operating microscope on the
diagnostic and therapeutic stages of root canal therapy
*Speaker: Dr Sergio A. Rosler/
Sponsor: Seiler Instrument & Mfg Co., Inc.*

Paradigm shift to 3-D endodontics:
XP-endo sequence, anatomical shaping and cleaning
with the exclusive adaptive core technology
*Speaker: Klaus Lauterbach/Sponsor:
FKG Dentaire S.A./American Dental Systems GmbH*

Technological advancements for safe root canal
preparations: reciprocating preparation
with simultaneous length determination
Speaker: Dr Mario Zuolo/Sponsor: VDW GmbH

10:30–11:00 Coffee break

11:00–12:30

Technological advancements for safe root canal
preparations: reciprocating preparation
with simultaneous length determination
Speaker: Dr Mario Zuolo/Sponsor: VDW GmbH

How to become a hero for your patients transforming
endodontic failures into successful cases:
5 different uses of MTA in endodontics
*Speaker: Dr Ricardo Tonini/
Sponsor: Produits Dentaires SA*

Intraosseous anesthesia:
the key for successfully and immediately
anesthetizing hot pulps
Speaker: Dr Stéphane Diaz/Sponsor: Dental Hi Tec

One file fits all? Facts and fiction
*Speaker: Dr Bernard Bengs/
Sponsor: Coltène/Whaledent GmbH*

The art of endodontics: A hands-on course
*Speaker: Dr Stephen Buchanan/
Sponsor: Dental Engineering Laboratories*

12:30–14:00 Lunch break

14:00–15:30

A universal, safe and efficient combination
for success in root canal treatment
Speaker: Dr Hugo Sousa Dias/Sponsor: Mani Inc.

Irrigation: Past and current state
Speaker: Beatriz Del Valle/Sponsor: Neolix SAS

Back to the roots: Retreatments done the easy way
*Speaker: Dr Sebastian Bürklein/
Sponsor: Komet Dental Gebr. Brasseler*

Value added cleaning and disinfection with
Laser Activated Irrigation—new paths
with PIPS and SWEEPS: evidence and critical analysis
Speaker: Prof. Roeland De Moor/Sponsor: Fotona d.o.o.

15:30–16:00 Coffee break

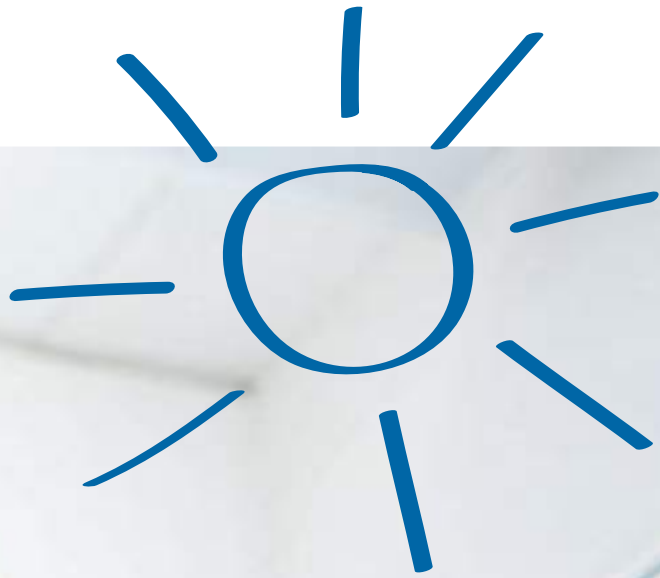
16:00–17:30

Treatment of endodontic perforations
with bioceramic materials
*Speaker: Dr Mario Zuolo/
Sponsor: Angelus Indústria de Produtos*

Root canal retreatment lectureship
Speaker: Dr Bing Fan/Sponsor: Zumax Medical Co, Ltd

Morita TR ZX2: An innovative and clever device that
saves time and increases safety
*Speaker: Dr Sebastian Riedel/
Sponsor: J. Morita Europe GmbH*

Obturation in 3-D continuous wave technique or
hydraulic condensation: how, when and where?
*Speaker: Dr Walter Vargas Obando/
Sponsor: Meta Biomed Inc.*



**Peace of mind
included** | The Endo-
System

Rely on us. Since 1869, satisfaction in endo for you and your patients has been our highest priority, and it always will be. We are committed to a holistic endodontic approach: perfectly matched products plus clinical education combined with excellent customer service. For easy and efficient endo treatments, today and tomorrow. **Don't make weak compromises – choose the VDW Endo-System with peace of mind included.**

Lecture programme

ROOTS SUMMIT 2018

Day 1: Friday, 29 June 2018

08:45–09:00 Opening

Dr Freddy Belliard & Stephen Jones

9:00–11:00 Invasive cervical resorption:
A clinical approach

Dr Elisabetta Cotti

11:00–11:30 Coffee break

11:30–13:00 Guided endodontics:
Possibilities and limitations

Dr Gergely Benyőcs

13:00–14:00 Lunch break

14:00–16:00 Endodontists—
The last best hope for the natural tooth

Dr John Munce

16:00–16:30 Coffee break

16:30–19:00 Case Presentations

Moderated by Dr David Jaramillo

19:00–21:00 Welcome reception

Sponsored by META BIOMED

Day 2: Saturday, 30 June 2018

09:00–10:30 Root canal therapy or vital pulp therapy?
Success determined by proper diagnosis Opening

Dr Jenner Argueta

10:30–11:00 Coffee break

11:00–13:00 Pain and infection management
in a contemporary endodontics office

Dr Jorge Vera

13:00–14:00 Lunch break

14:00–16:00 Improve your microscope skills
to improve outcomes

Dr Carlos Aznar Portoles

16:00–16:30 Coffee break

16:30–18:00 The role of bioceramics
in clinical endodontics

Dr Josette Camilleri

20:00–23:00 Evening event

Day 3: Sunday, 1 July 2018

08:30–09:00 Results of poster competition
and case presentations

Moderated by

Dr David Jaramillo

09:00–10:30 Reliable adhesive
post-endodontic restoration
in the hands of the endodontist

Dr Daniel Černý

10:30–11:00 Coffee break

11:00–13:00 Improving retreatment
outcomes

Dr Mario Zuolo

13:00–14:00 Lunch break

14:00–17:00 The Art of Endodontics

Dr Stephen Buchanan

17:00–17:15 Closing

*Dr Freddy Belliard
& Stephen Jones*

YOUR PATIENTS ARE NOT STATUES, AND THAT'S OK.

Patient movement is the number one contributor to compromised image quality. Our new **Planmeca CALM™** corrective algorithm will allow you to eliminate movement artefacts from CBCT images and succeed every time.

Without Planmeca CALM™



With Planmeca CALM™



Now available
for all Planmeca
3D imaging units!

Find more info and your local dealer!

www.planmeca.com



PLANMECA CALM™

Movement artefact correction for CBCT images

Planmeca Oy Asentajankatu 6, 00880 Helsinki, Finland. Tel. +358 20 7795 500, fax +358 20 7795 555, sales@planmeca.com