

# DIVE INTO 2025 THE YEAR OF SWEEPS<sup>®</sup>



## SPEAKER

# Dr Roeland De Moor

Roeland J De Moor, DDS, Phd, MSc graduated in 1984 from the Dental School, Ghent University, Belgium. He has an MSc in Paediatric Dentistry and an MSc in Endodontics and Restorative Dentistry (Ghent University, Belgium), and received the PhD degree in 1995 at the same university.

**H**e belongs to the group of officially recognised dental judicial experts in Belgium.

At present, he is a senior full professor at the Ghent University (Belgium) and guest professor at the University Clinic of Vienna (Austria); his private clinical practice is devoted to endodontics, dental traumatology, orofacial damage assessment and dental laser bleaching. He has a 35-year expertise in the field of laser applications in dentistry.

His research is focused on the application of laser technology for root canal cleaning and disinfection, endodontic quality, application of light activated nanoparticles for endodontic purposes, Laser Doppler Flowmetry (pulp vitality) and the dynamics of root canal irrigation. He is a member of the editorial board of the International Endodontic Journal, Journal of Endodontics, Journal of Adhesive Dentistry and Dentistry Journal – section “Lasers in Dentistry”; and serves as a reviewer on a regular basis for all dental laser journals and endodontic journals with impact factor. He has authored and co-authored more than 250 articles in peer-reviewed journals. Together with Giovanni Olivi and Enrico DiVito he has authored the book “Lasers in Endodontics”, but has also contributed to several other textbooks on Endodontology, Dental Laser Applications and Restorative Dentistry.



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## ABOUT THE LECTURE

There has been a volcanic eruption of technologies in Endodontics over the past 20 years.

The development of NiTi shaping files, the debut of biocompatible materials, the advent of CBCT for improved diagnostics.

These minimally invasive technologies promote the maximum preservation of tooth structure, but according to an old aphorism enunciated by Herbert Schilder, for the success of endodontic therapy, “what is removed” is more important than “what is introduced” into the canal system.

In this view, laser activated irrigation, and more specifically SWEEPS technology represents a breakthrough method for 3D cleaning and disinfection of the root canal system.

Er:YAG laser technology is used to activate the commonly used irrigants in endodontics (NaOCl and EDTA) and does not replace any conventional instrumentation.

The SSP technology (single super short pulse) first and the SWEEPS one (dual ultra short pulse) today are validated by a wide body of published and non-published experiments and data.

High-speed videos at 100.000 frames are shown to explain the innovative dual pulse laser emission in endodontic environment.

Scanning Electron Microscopy and CT imaging were used to evaluate the tissue dissolution, the debridement, smear layer, and endodontic filling material removal from the endodontic space.

Bacteriological studies as well as Confocal analysis were performed to assess the decontaminating effect of these techniques.

The lecture will present an overview of the scientific concepts behind the clinical application and a series of clinical cases will be discussed.

## LEARNING OBJECTIVES

The advantages of SWEEPS technology.

Proper timing and use of NaOCl and EDTA.

The importance of irrigation in endodontic success.

Limitations of conventional and modern irrigation systems.

Practical tips for safe and effective laser use in endodontics.

Comparisons of sonic, ultrasonic, multisonic, and laser-activated irrigation.

Understand benefits that go beyond deep disinfection. The incredible debridement capabilities of SWEEPS prior to the use of files and all the way through treatment greatly improves efficiency by quickly breaking through calcifications



February 13<sup>th</sup>, 2025

from 6pm to 9pm



Pan Pacific Toronto

900 York Mills Road

North York, The Princess Room

REGISTRATION IS FREE



*Have any questions?*

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