

Laser Integration: Using the Power of Light to Achieve the Next Level of Patient Care

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Abstract: In this presentation, we will begin with the history of lasers in general, and specifically in dentistry. We will discuss the different wavelength options available and how to choose the appropriate device to achieve the desired treatment goals. We will cover the principles of laser-tissue interactions and identify which lasers are best suited for efficient cutting, coagulation, disinfection, soft-tissue surgery, and hard-tissue applications. Lasers are not all created equal; however, when clinicians understand the intended clinical outcome and the physical principles that determine how lasers behave in living tissues, they can consistently deliver an improved patient experience. From photobiomodulation to support healing, osseointegration, nerve regeneration, and pain management, to minimally invasive treatment of periodontal pockets; from laser-activated irrigation of complex root canal systems to laser cavity preparation with reduced need for local anesthesia, understanding how lasers can improve clinical outcomes and the patient experience will inform, engage, and inspire attendees.

Learning objectives

- * History of lasers from the 1960s to the present
- * Types of lasers used in dentistry and their applications
- * Laser-tissue interactions
- * What makes lasers an irreplaceable instrument in the dentist's armamentarium
- * How patient experience can be enhanced when lasers are used instead of conventional tools

Profile

- * University of Toronto Faculty of Dentistry (DDS)
- * RWTH Aachen University, Germany - Master of Science in Lasers in Dentistry
- * Executive Director, WCLI
- * Founder, Canadian Dental Laser Institute (CDLI)
- * Present. Mastership Certificate, ALD (Academy of Laser Dentistry)