



15 credit hours

A hands-on 2 day Workshop

# Utilization of Er:YAG & Nd:YAG Lasers in Dentistry



May 3 and 4, 2025  
8am to 5pm



Vancouver  
TBA



**Fotona**  
Ultra Performance Lasers™

# Course Overview

## Objective of the first module

The first module of the Master's Program (2 days) represents a comprehensive overview of laser physics, laser interactions with different biological tissues, laser safety, operating a dental laser device and selected treatments.

The first module is designed to provide basic knowledge to understand different laser treatment methods in dentistry. PHAST Start to Restorative, Soft Tissue Surgery, Endodontics, Perio and Nightlase

## *The program for the first module*

### Laser physics

- The electromagnetic spectrum and laser wavelengths
- History of lasers
- Basic interaction with tissues
- Construction of a solid-state laser
- Laser parameters
- Laser beam profiles
- Delivery of a laser beam

### Laser safety

- Thermal effects
- Mechanical effects
- Electrical and fire hazards
- Chemical hazards
- Eye hazards and protective goggles
- Laser safety standards and implementation in the dental office

### Laser interactions with biological tissues

- Ablation mechanism
- Transmission mechanism
- Reflection mechanism
- Scattering mechanism
- Hands-on training with all mechanisms

### Operating Fotona dental laser devices

- Technology features (VSP, EFC, QSP)
- Handpieces overview
- Setting parameters
- Device maintenance
- Hands-on operation of the device

Multiple choice test



# Instructor



Dr Scott Benjamin

## About the Speaker

Dr. Scott Benjamin is an internationally recognized expert and lecturer on Dental Lasers, Oral Cancer and Advanced Dental Technologies and is in private practice in rural upstate New York where he utilizes several lasers of different wavelengths on an everyday basis.

Dr. Benjamin is Co-Chairman of the ADA Standards Committee Working Group on Dental Lasers, a member of American National Standards Institute (ANSI) Committee Z-136 on Laser Safety and is a Past-President of the Academy of Laser Dentistry (ALD) and was their 2007 and 2010 Scientific Program Chairman.

Dr. Benjamin has faculty appointments at several dental schools and is a Past-Chair of the American Dental Educators Association's (ADEA) Lasers in Dentistry Special Interest Group (LiD-SIG) and has been intimately involved in developing the lasers curriculum for dental and hygiene schools throughout North America. He has published over 200 articles on dental lasers and advanced dental technologies and is a member of the editorial board of several prestigious peer reviewed dental journals.

## Dr Benjamin's Affiliations

- Midwestern University Colleges of Dental Medicine, Adjunct Professor
- University at Buffalo School of Dental Medicine, Visiting Professor
- Eastman Institute for Oral Health at the University of Rochester, Associate Professor
- ADEA's Lasers in Dentistry-Special Interest Group, Past-Chair
- 2014-2015 President of the Academy of Laser Dentistry (ALD)
- 2018 Recipient of ALD's Distinguished Service Award for Laser Dentistry
- Advanced Technology Section Editor for Compendium, PPAD, and JPH
- Editorial Board of the Journal of Laser Dentistry, Dentistry Today, & Inside
- Dentistry Member of ADA Standards Committee on Dental Products (ADA-SCDP)
- Co-Chair of the ADA-SCDF Working Group on Dental Lasers
- Member of ADA Standards Committee on Dental Informatics (ADA-SCDI)
- Chair of the ADA-SCDI Working Group on Digital Imaging



NATIONAL DENTAL INNOVATIONS

# Explore the Power of Laser Dentistry with Module I Foundation in Dental Laser Treatments



Restorative



Photobiomodulation



Perio Surgery and pocket reduction



Endo with SWEEPS



NightLase AirWay

This module covers essential treatments, including:

- **Restorative Procedures:** Achieve precise, minimally invasive cavity preparations with superior patient comfort.
- **Photobiomodulation (PBM):** Enhance healing and reduce inflammation through non-invasive laser therapy.
- **Periodontal Surgery and Pocket Reduction:** Perform targeted gum surgeries with minimal discomfort and faster recovery times.
- **Endodontics with SWEEPS® Technology:** Experience the future of root canal therapy, delivering enhanced cleaning and disinfection.
- **NightLase® Airway Therapy:** Offer your patients a non-invasive solution for snoring and sleep apnea by tightening airway tissues.

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Take the first step in becoming a leader in laser dentistry, mastering treatments that provide enhanced precision, reduced healing times, and unparalleled patient satisfaction.

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NATIONAL DENTAL INNOVATIONS

# More Information

Breakfast and lunch are provided.



NDI contact information:

Website: [www.nationaldental.com](http://www.nationaldental.com)

Phone: +1 (800) 392-1171

Email: [info@nationaldental.com](mailto:info@nationaldental.com)

Address: 203-89 Collier St, Barrie ON, L4M 1H2



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