



Soft Tissue Laser Dentistry for the Pediatric Population

Presented by
The American Laser
Study Club



2-Day Hands-On Course – 14 CEUs

Friday & Saturday
December 3-4, 2021
9:00 AM – 5:00 PM

Boston University
Henry M. Goldman School of Dental Medicine
635 Albany Street, Boston, MA 02118

Meet the Instructors



Athanasios Zavras
DDS, MS, DrMedSc

Chair, Department of Pediatric
Dentistry, Boston University
Henry M. Goldman School of
Dental Medicine

Dr. Zavras holds: a DMD degree from the University of Athens School of Dental Medicine in 1991; a Certificate of Advanced Specialty Education in Pediatric Dentistry from Tufts University School of Dental Medicine in 1993; an MSc in Epidemiology from Harvard University School of Public Health in 1994; a Certificate of Advanced Studies in Oral Epidemiology from Harvard University School of Dental Medicine in 1998; a Certificate of Advanced Specialty Education in Dental Public Health from the Harvard University School of Dental Medicine in 1999; a DMSc in Oral Biology/Epidemiology from Harvard University in 1999; and a DDS from Columbia University College of Dental Medicine in 2012. He is a Diplomate of the American Board of Dental Public Health and is licensed by both the Massachusetts and New York State Dental Boards.



Martin Kaplan
DMD

Dr. Kaplan has practiced Pediatric Dentistry for 41 years. He had been a volunteer part-time adjunct clinical instructor in the Pediatric post-graduate Department at Tufts University School

of Dental Medicine in Boston from 2006-2017. He has lectured nationally and internationally and has co-authored several dental articles and has been a contributing author in several dental texts including the first-ever *Laser Surgery Atlas for the Treatment of Infant Tongue- & Lip-Ties*. Dr. Kaplan was instrumental in developing the first in the country comprehensive Infant Laser Frenotomy class which has been co-presented with other specialists in the laser and lactation professions at Tufts University Dental/Medical Center in Boston.



Catherine Watson Genna, BSc, IBCLC

Catherine is particularly interested in dyads with medical challenges to breastfeeding. In addition to mentoring lactation interns, she uses her clinical photos and videos in presentations to healthcare professionals on assisting breastfeeding babies with anatomical, genetic or neurological problems. She participates in a research collaborative with Columbia University and Tel Aviv University Depts of Biomedical Engineering, investigating biomechanics of the lactating nipple and aspects of sucking and swallowing in breastfeeding infants. Board certified for 20 years, she is also the author of two lactation texts, professional journal articles, and chapters in the Core Curriculum and Breastfeeding and Human Lactation. Catherine served as Associate Editor of the United States Lactation Consultant Association's official journal *Clinical Lactation* for its' first seven years.

Course Description: Laser technology now allows for a range of safe and effective procedures, to better serve our young patients. This course will provide fundamental knowledge that will enhance your understanding of the issues of pediatric laser dentistry. It will provide detailed instruction of how a laser can be used safely and effectively to perform gingivectomies, frenectomies, operculectomies, surgical exposures of impacted teeth and more. Special emphasis will be placed on infant tongue-tie and lip-tie releases since as many as 5% of newborns in the US have tongue-ties significant enough to cause breastfeeding difficulties.

A good surgical laser for cutting soft tissue must be able to vaporize soft tissue, while at the same time efficiently coagulating surgical margins. Not all laser wavelengths are suitable to comply with both requirements. This course focuses on the practical aspects of soft tissue laser surgery and on the fundamental processes involved in the laser-tissue interaction; it helps attendees learn how deep the laser beam cuts and how deep the coagulation and hemostasis extend into the surgical margins. Our **hands-on participation lab** is designed to train attendees on how to perform laser frenectomies safely and efficiently.

Clinical Curriculum

- Learn the scientific basis of how lasers work in dentistry along with the tissue-energy interface;
- Explore different types of dental lasers and understand their indication and clinical utility, as well as advantages and disadvantages;
- Learn the detailed physics of soft tissue ablation and coagulation with laser and hot tip diode (contact non-laser) devices;
- Review the latest scientific literature on soft-tissue laser use in dentistry;
- Understand issues of safety and efficacy as well as relevant regulations;
- Learn how to document consent, diagnosis and the efficacy of the laser;
- Explore current methods of clinical assessment, diagnosis and treatment of soft tissue problems;
- Practice laser soft tissue surgeries, including frenectomy simulations on tissue samples (pig jaws), during the laser wet lab.

Course Objectives

- Understand infant sucking physiology and how tongue ties impair infant suck;
- Use reliable diagnostic criteria to screen babies and children for this condition;
- Understand orthodontic-myofunctional connection;
- Understand how the soft tissues of the orofacial complex may lead to malocclusion, TMD, headaches, and other problems;
- Discuss multiple cases that involve the use of lasers to perform gingivectomies, operculectomies, exposures of impacted teeth
- Understand all consequences and benefits of using lasers to remove oral tissues when needed.

Laser Curriculum: Laser Surgery and Safety Basic Knowledge Certificate Curriculum for this Course has been developed by the American Laser Study Club (ALSC). The ALSC's curriculum overcomes the known limitations of many laser dentistry courses, and includes the detailed physics of soft tissue ablation and coagulation with laser and hot tip (non-laser) devices. Laser hands-on wet lab on tissue samples will include simulated incisions, excisions, ablation and coagulation modalities as well as laser safety instructions and demonstrations. Laser instructions will be assisted by guest speaker Peter Vitruk, PhD, MInstP, CPhys, a laser physicist who founded the American Laser Study Club and LightScapel LLC.



Hands-On Participation Session:

- Laser Safety
- Laser Surgical Technique Simulations
- Superficial Ablation
- Superficial Coagulation
- Shallow Incision
- Deep Incisions
- Practicing Surgical Techniques on a Pig Jaw

2 HOURS



Course Certificates: Course participants, who successfully complete examination, will be awarded a **LASER SAFETY basic knowledge CERTIFICATE** from the Board of Laser Safety of the Laser Institute of America (**DISCOUNTED** cost for the ALSC members), as well as a **Laser Dentistry and Laser Surgery Basic Knowledge and Hands-On participation Wetlab CERTIFICATE** from the American Laser Study Club (**FREE** for the course participants).



Tuition and Registration Information:

alsc.club/bu2021