ATTENDEE'S BROCHURE

ALD® Academy of Laser Dentistry

2026

THE POWER OF LIGHTS In Las Vegas

ALD 33rd YEAR 1993-2026

At the 33rd Academy of Laser Dentistry's Annual Conference, Certification & Exhibition

Includes the World-Renowned SLC Laser Training and Certification Program

October 15-17, 2026
Las Vegas, NV

Venue: Sahara Las Vegas Hotel

Presentations and Workshops in Advanced Dental Laser & Light Therapy Led by Three World-Renowned Organizations

ALD® Academy of Laser Dentistry

WALT WORLD ASSOCIATION FOR PHOTOBIOMODULATION THERAPY

NAALT North American Association for PhotobiomoduLation Therapy

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laserdentistry.org

ADA C·E·R·P® | Continuing Education Recognition Program

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33rd Academy of Laser Dentistry Annual Conference, Certification & Exhibition

October 15-17, 2026 • Las Vegas, NV

Dear Attendees and Colleagues,

I am honored to invite you to the 33rd Academy of Laser Dentistry's Annual Conference.

This year we are partnered with the **World Association for Photobiomodulation Therapy** and the **North American Association for Photobiomodulation Therapy**.

Our **33rd ALD Annual Conference** will take place at the **Sahara Las Vegas Hotel** in **Las Vegas, Nevada**, from **October 15-17, 2026**. This historic and iconic venue, is ideally located near many of the city's most famous attractions and landmarks, making it the perfect setting for a global gathering of laser and photobiomodulation professionals.

This annual conference will offer Standard Level Training and Certification, Advanced Laser Wavelength Training and world class experts in the area of photobiomodulation that has not been seen in the US prior to this event. We also offer a chance for all dental and medical professionals to further showcase their case studies or research during our E-Poster Competition.

The conference will offer a comprehensive program across a wide range of dental and medical disciplines, including:

- **Laser Assisted Endodontics**
- **Laser Assisted Pedodontics**
- **Laser Assisted Periodontics**
- **Laser Assisted Prosthodontics**
- **Laser Assisted Implantology & Oral Surgery**
- **Orofacial Pain Management & Wound Healing**
- **PBM & Tissue Regeneration**

Attendees will have the opportunity to deepen their expertise in these key specialties through targeted lectures and hands-on workshops, all while discovering the latest innovations in laser technology.

Whether you're looking to refine your skills or explore new advancements in the field of laser dentistry and photobiomodulation, the 33rd ALD Annual Conference offers an unmatched platform for professional growth, collaboration, and networking with leaders from around the globe.

Visit our website www.laserdentistry.org for more information and to register today!

Sincerely,
Dr. Shigeyuki Nagai, DDS, PhD
President-Elect
Chairman, 33rd ALD Conference & Exhibition
Academy of Laser Dentistry

ALD Facts

- ALD is the only not-for-profit organization serving tech-savvy dentists without a commercial bias to one particular company.
- Membership: 2,000+ Spanning 23 countries and growing.
- Professional Membership: General dentists, pediatric dentists, oral and maxillofacial surgeons, orthodontists, endodontists, periodontists, prosthodontists, dental hygienists.
- 10 International Chapters and 13 International Study Clubs

ALD Conference Location & Dates

- **Sahara Las Vegas Hotel**
  2535 Las Vegas Blvd South,
  Las Vegas, NV 89109
- **Conference Dates**
  Thursday, October 15 thru
  Saturday, October 17, 2026
- **Exhibits Open**
  Friday, October 16, 2026
  7:30am-6:30pm
  &
- Saturday, October 17, 2026
  7:30am-5:30pm

Conference Chairs

Dr. Shigeyuki Nagai
ALD President-Elect &
33rd Annual Conference Chair

Prof. Dr. Georgios E. Romanos
33rd Annual Conference
Scientific Chair

Prof. Reem Hanna
Scientific Director &
WALT Scientific Sessions Chair

ALD Speakers

Keynote Speakers

Homa H. Zadeh, DDS, PhD
Advanced in Laser-Assisted Regenerative Periodontal and Peri-Implant Plastic Surgery

Jan Tunér, DDS
Mastering the Parameters of PBM

Akira Aoki, DDS, PhD
Innovative Flapless Periodontal Surgery Using Er:YAG Laser; Er-LCPT

General Session Speakers

Robin Horton, BDS, FALD, FWCLI
Every Procedure is a Laser Procedure!

Kinga Grzech-Leśniak, Prof., DMD, MSc, PhD
Innovative Approaches in Managing Oral Biofilm and Periopathogens Using Laser Therapy

Nick Clausen, MBA
Laser to Legacy: Converting Clinical Excellence into Long-Term Wealth

Ali Obeidi, DDS, MSc, MS, FALD
When Evidence Falls Short: Rethinking How We Interpret Research in Laser Dentistry

Janina Golob Deeb, DMD, MS
Use of Erbium Lasers for Debonding

Saleh Anvaria Aria, DDS, MSc
Laser-Assisted Implantology: Improving Precision, Stability, and Healing in Implant Treatment

ALD Speakers

General Session Speakers

Laura Braswell, DDS
Using Lasers to Help Diagnose and Manage Auto-Immune Diseases

Larry Lieberman, DDS
Lasers for the GP and Beyond

Natalia Elson, DDS
Laser Dentistry as a Transformative Educational Tool: Opportunities and Barriers in Academic Integration

Mel A. Burchman, DDS, MALD
Utilizing Photobiomodulation (PBM) to Treat Cancer Symptoms and Cancer Treatment Side Effects

Mohamed Yehya, DDS, PhD
From Perforation to Preservation: A Laser-Led Amazing Human Body Regeneration, Laser-Assisted Multimodal Management of an Extensive Mandibular Periapical Granuloma with Cortical Plate Perforation and Risk of Pathological Frature

Haitham Elafifi, DDS
Thermal Imaging—Monitored At-Home Photobiomodulation Therapy for Orofacial Inflammatory Processes

Ambrose Chan, PhD, MSc, BDS, FRACDS, FICD
Integrated Photonics-Enhanced Precision Dentistry—Current Status & Future Trends of Applications Across Dental Disciplines

Md Arifur Rahman, BDS, MSc
Laser-Assisted Management of Severely Curved Canals to Prevent Ledge Formation

Alan Kwong Hing, DDS, MSc
Bridging Chairside Laser Therapy and At-Home Photobiomodulation: An AI-Enhanced Model for Improving Clinical Consistency and Patient Compliance

Maki Tanaka, DDS, PhD
Combination Laser Therapy—Effectively Using Multiple Wavelengths for Best Overall Treatment Results

Ernesto Vatteroni, DDS, PhD
Laser-Induced Hypoxia of the Post-Extraction Socket to Preserve Bone Volume Without Grafting

Dental Hygienist Track Speakers

Lynn Atkinson, RDH
"Lighting the Way" Photobiomodulation for Healing, Pain and Health in Hygiene

Erin Doffoney, RDH
Deferring and Referring with Confidence: Clinical Judgment, Ethical Responsibility, and Collaborative Care Decision-Making for the Dental Team

Angie Wallace, RDH
Are the Rules and Regulations for Lasers in Dental Hygiene Changing Again?

Alfred Wyatt, DMD
Illuminating Precision: Understanding Laser Wavelengths in Dental Hygiene

Laura Braswell, DDS
Periodontal Disease: The Oral Systemic Connection

Laurie Bricker, RDH, MS
From Operatory to Educator: The RDH-to-Faculty Journey Through Laser Dentistry and Higher Education

Poster Competition

Shruti Natarajan, DDS

The Resolution of Oral Lesions with Photobiomodulation Therapy: A Case Report

Abdukhamidjon Azimov, DDS, MS

Comparative Evaluation of Cutting Accuracy & Thermal Damage in Oral Soft Tissue Using Novel Fiber Lasers & Conventional Surgical Techniques

Rachel Dadson, DDS Candidate

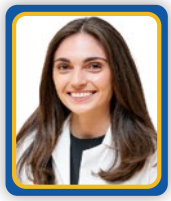
Laser-Assisted Frenectomies: A Systematic Literature Review

Erin Doffoney, RDH

Scarlet Secrets: Red, Relentless, & Rare Uncovering Plasma Cell Gingivitis

Edward Pocola, DDS

Evidence for Structured Laser Dentistry Training Outcome for AEGD Residents



Maya Albano, Dental Student

Laser Versus Piezoelectric Surgery in Bone: A Literature Review

Vipul Kumar Srivastava, BDS, MDS

Multimodal Diode Laser Management of Oral Submucous Fibrousis-A Pre-Malignant Condition: 3 Case Reports Using 450 nm & 980 nm Diode Lasers

Chi-shiun Tsai, DDS, PhD

Effect of Red & Near-Infrared LED Irradiation on the Proliferation & Differentiation of Rat Odontoblast-Like Cells in Vitro

Yujin Ohsugi, DDS, PhD

Therapeutic Effects & Molecular Mechanisms of Near-Infrared Phototherapy in a Mouse Model of Medication-Related Osteonecrosis of the Jaw

Mohammed Nourouzian, DDS, MSc

Photobiomodulation Therapy for Accelerating Soft Tissue Anesthesia Reversal & Preventing Self-Inflicted Injuries in Pediatric Dentistry: A Systematic Review

Isabella Falco

Reported Legal Matters Due to Laser Complications in Dentistry

ALD Hands-On Workshops

Thursday, October 15, 2026

$795

Mastering Frenectomy & Soft Tissue Surgery:
A Complete Clinical System from Diagnosis to Long-Term Outcomes

Lawrence Kotlow, DDS

Transform the way you diagnose and treat restrictive oral tissues and soft tissue conditions. This comprehensive course provides a step-by-step system you can immediately implement in your practice using laser technology.

This course includes live surgical videos and detailed case reviews. It provides practical protocols that you can implement immediately, along with clear, concise, and clinically focused instruction. The content is applicable to multiple laser platforms.

This course is different because it provides a complete start-to-finish clinical system rather than focusing solely on technique. Participants will learn how to achieve predictable outcomes through practical, real-world applications and seamlessly integrate these procedures into their daily practice. The curriculum is built on decades of clinical experience and reflects insights gained from treating thousands of patients.

Who Should Attend: General Dentists, Pediatric Dentists, ENTs and Medical Professionals, Lactaction Consultants and Myofunctional Therapists, any clinician involved in infant, pediatric, or airway-focused care

Learn how to accurately assess and diagnose restrictive tethered oral tissues (RTOTs), determine appropriate case selection, and perform laser frenectomy procedures for infants, children, and adults. This course covers safe and efficient soft tissue techniques, tissue management, post-operative care, and the connection between oral restrictions, feeding, airway development, and long-term health.

12:30pm - 6:30pm

ALD Hands-On Workshops

Thursday, October 15, 2026

DDS: $895 | RDH: $645

Standard Level Laser Training & Certification Course

The standard level course is considered the minimum required education level in laser dentistry for any dental professional to be able use lasers clinically on patients safely and effectively with recognized expertise level within their individual scope of practice. The course emphasizes the importance of laser safety protocols with device specific and/or wavelength instructions demonstrating a knowledge base through didactic and hands-on elements.

Laser safety protocols are of paramount importance for everyone within the dental laser practice with knowledge pertaining to devices, wavelengths, standard operating best practice principles for safe, effective and efficient execution of all laser assisted procedures for better outcomes for our patients.

Governing bodies in most countries require the presence of Laser Safety Officers (LSO) and Laser Protection Advisors (LPA) in laser practices and some of these elements will be covered with the course. The hands-on portion will familiarize and empower participants to acquire practical skills to use the laser devices safely in various clinical modalities. This course is also one of parts of a three-part ALD standard level certification. The course requires didactic scientific education and clinical case reviews as well as additional hands-on simulation ALD recommended specimen protocols for part 2 certification.

8:00am - 5:00pm | Includes ALD Standard Level Certification

Friday, October 16, 2026

Erbium: Chromium Laser Workshop

Marina Polonsky, DDS

There are over 50 wavelengths available for dentists to purchase. From visible to far infrared lasers, they are built differently, have different delivery systems, different modes of operation and different chromophores they are looking for as they interact with living tissues, which also have different composition. The choice of which laser best suits your practice, your patients and how you want to differentiate and market yourself is not an easy one. Because no one wavelength can do everything, it is important to understand limitations of each and how combining lasers and create confidence in the best possible outcome for the clinician and minimal complications and fastest recovery for the patient. Erbium lasers are known for fast cutting of both soft and hard tissues including bone, dentin and enamel with minimal thermal effects but often lack in deep and predictable coagulation and disinfection. Diode lasers are not indicated for contact with hard tissues due to deep thermal side-effects, but that is what makes them superior in coagulation and disinfection. By knowing the strength and weaknesses of all laser wavelengths and how lasers are different from conventional instruments like scalpels, electro-surgery and drills, we can develop multi-wavelength treatment protocols easy to implement into everyday practice. So bring your typical daily schedule and we will help you to turn your conventional day into a laser-assisted next level of patient care day using Er,Cr:YSGG 2780nm erbium family laser and Epic 940nm diode family laser.

2:00pm - 6:00pm

Photobiomodulation in Dentistry

Grace Sun, DDS
Arun Darbar, DDS, MS

This workshop explores the transformative potential of Photobiomodulation (PBM) in dentistry and orofacial pain management. PBM is a non-invasive, non-pharmaceutical treatment that enhances patient experiences by promoting healing, reducing swelling, and alleviating pain. It can be applied across various dental specialties, including root canals, extractions, periodontal treatments, orthodontics, and prosthodontics. Additionally, PBM plays a significant role in managing orofacial pain conditions such as TMJ dysfunction, trigeminal neuralgia, xerostomia, and headaches. The integration of acupuncture principles with PBM adds an exciting dimension to treatment outcomes. This hands-on workshop will cover practical PBM techniques, protocols, and real-world applications. Participants will have the opportunity to engage in discussions, ask questions, and gain valuable insights to bring back to their practices for immediate implementation. Whether you're a general dentist or a specialist, this workshop will enhance your ability to offer cutting-edge, integrative care to your patients. Example applications: TMJ management, surgical pre-conditioning, post-op recovery and wound healing, tissue regeneration, gagging prevention, reducing chairside anxiety, reducing skeletomuscular discomfort (analgesics), sensory integration, role of mitochondria, cranial nerves to PBM etc.

2:00pm - 6:00pm

Oral Biopsies and the Roles Lasers and Light Technologies Play

Alfred Wyatt, DMD

Approximately 60% of patients with an oral lesion identified during a routine dental examination do not follow through with specialist evaluation or treatment. Early recognition and appropriate management of oral pathology are essential to improving patient outcomes. This course provides a practical, step-by-step approach to performing a comprehensive head and neck and oral soft tissue examination, helping clinicians identify suspicious lesions and determine when further diagnostic procedures are warranted.

Participants will review biopsy protocols, explore the available options for tissue evaluation and diagnosis, and gain insight into the expanding role of laser and light-based technologies in oral pathology. By understanding the complete diagnostic process—from examination to tissue assessment—attendees will be better equipped to detect abnormalities, facilitate timely intervention, and enhance the quality of patient care.

2:00pm - 6:00pm

ALD Hands-On Workshops

Saturday, October 17, 2026

DDS: $895 | RDH: $645

Standard Level Laser Training & Certification Course

The standard level course is considered the minimum required education level in laser dentistry for any dental professional to be able use lasers clinically on patients safely and effectively with recognized expertise level within their individual scope of practice. The course emphasizes the importance of laser safety protocols with device specific and/or wavelength instructions demonstrating a knowledge base through didactic and hands-on elements.

Laser safety protocols are of paramount importance for everyone within the dental laser practice with knowledge pertaining to devices, wavelengths, standard operating best practice principles for safe, effective and efficient execution of all laser assisted procedures for better outcomes for our patients.

Governing bodies in most countries require the presence of Laser Safety Officers (LSO) and Laser Protection Advisors (LPA) in laser practices and some of these elements will be covered with the course. The hands-on portion will familiarize and empower participants to acquire practical skills to use the laser devices safely in various clinical modalities. This course is also one of parts of a three-part ALD standard level certification. The course requires didactic scientific education and clinical case reviews as well as additional hands-on simulation ALD recommended specimen protocols for part 2 certification.

8:00am - 5:00pm | Includes ALD Standard Level Certification

Diode Laser Workshop:
From Fundamentals to Immediate Clinical Implementation

Ali Obeidi, DDS, MSc, MS, FALD

This comprehensive, clinically driven workshop is designed to provide general dentists with the knowledge, confidence, and hands-on experience necessary to integrate diode laser technology into daily practice immediately following the course. As demand for minimally invasive, efficient soft-tissue procedures continues to grow, diode lasers have become an essential tool in modern dentistry. However, many clinicians remain uncertain about proper technique, settings, and clinical application. This program is specifically structured to bridge that gap. The workshop begins with a focused one-hour lecture reviewing the foundational principles of diode laser dentistry, including laser physics, tissue interaction, and safety protocols. Emphasis will be placed on practical understanding rather than theory alone, enabling participants to make predictable and biologically sound clinical decisions. The lecture will also introduce multiple diode laser wavelengths and highlight their clinical versatility, preparing participants to work with different systems and technologies. Following the didactic portion, participants will engage in an intensive 2 to 2.5-hour hands-on session featuring live demonstrations and guided mentorship. Attendees will practice on animal tissue models, simulating real clinical scenarios to develop tactile familiarity and procedural confidence. Multiple diode laser units and wavelengths will be available, allowing participants to gain experience with different devices and settings while understanding their clinical indications. Special attention will be given to technique sensitivity, proper laser settings, fiber initiation and management, and avoiding common clinical errors. Step-by-step protocols will be demonstrated to ensure predictable, efficient, and safe outcomes. This workshop is ideal for general dentists considering the purchase of a diode laser, as well as those seeking to maximize the value of existing equipment. By the end of the session, participants will have a clear, practical roadmap for incorporating diode laser procedures into everyday clinical practice, allowing them to confidently begin using this technology immediately after the conference.

2:00pm - 6:00pm

$495

Elevating Patient Care With Laser Dentistry

Larry Lieberman, DDS

Utilizing slides, videos, and discussion, have more fun and add to your bottom line doing dental procedures, facial aesthetics, and opening airways with lasers. Photobiomodulation—anytime there is pain and/or inflammation. See how lasers can make everything we do better.

Open your airway and open your mind with Nightlase. Learn how to recognize and treat sleep disordered breathing in adults and children. On a great day we save a smile; on an amazing day we save a life through dental-medicine. I will share my passion for lasers and improving the quality of our patients' lives.

This course will cover the aging process of skin and how to treat it. Smoothlase—eliminating wrinkles. Liplase—plumping lips with lasers. Eyelase—helping to rid dark circles and eye bags. Facial peels with little downtime using Exosomes and/or PRF. CPAP, MAD (mandibular advancement devices), Nightlase—what and when?

2:00pm - 6:00pm

CO_2 Laser Workshop

Georgios Romanos, Prof. Dr. med. dent., DDS, PhD

Soft tissue surgery is common in clinical dentistry and can be performed by different types of lasers. General practitioners prefer to feel contact with the soft tissue during incision, excision or coagulation of blood vessels. This course will present and train clinicians to understand the difference between contact and non-contact laser surgery. The CO2 laser as the most common laser wavelength for oral surgical procedures allows an excellent cutting efficiency and provides opportunities in the treatment of periodontal and peri-implant diseases with significant benefits for patients and clinicians. Pre-prosthetic surgery, removal of benign soft-tissue tumors, coagulation of hemangiomas, excision of precancerous lesions such as leucoplakias, management of drug-induced gingival overgrowths, and the treatment of peri-implantitis. These examples will outline the relevant clinical protocols and highlight the importance of choosing the correct laser wavelength for clinical daily practice.

2:00pm - 6:00pm

WALT/NAALT Speakers

WALT Keynote Speakers

Juanita Anders, MS, PhD

The Systematic Effects of Photobiomodulation Therapy: A Review of Evidence For and Against

Praveen Arany, BDS, MDS, MMSc, PhD

Recent Advances in Photobiomodulation: From Precision Personalized Care to Policy Updates

NAALT Keynote Panel Speakers

J. Chris Castel, PhD

The Evolving Role of PBM in Orofacial, Head & Neck Care: Expert Roundtable

Praveen Arany, DDS, PhD

The Evolving Role of PBM in Orofacial, Head & Neck Care: Expert Roundtable

Chukuka S. Enwemeka, PhD, FACSM

The Evolving Role of PBM in Orofacial, Head & Neck Care: Expert Roundtable

Violet V. Bumah, PhD

The Evolving Role of PBM in Orofacial, Head & Neck Care: Expert Roundtable

Plenary Session Speakers

Juanita Anders, PhD

The Systematic Effects of Photobiomodulation Therapy: A Review of Evidence For and Against

Praveen Arany, BDS, MDS, MMSc, PhD

Recent Advances in Photobiomodulation: From Precision Personalized Care to Policy Updates

René-Jean Bensadoun, MD, HRD

Photobiomodulation in Cancer Supportive Care: Evidence-Based Indications, Clinical Applications and Future Perspectives

Liisa Laakso, BPhty, PhD

Artificial Intelligence as a Framework for Precision Photobiomodulation Dosing

Nicolette Houreld, D. Tech

Photobiomodulation at 660 nm Activates Wnt/β-Catenin Signalling and Enhances Wound Healing

Heidi Abrahamse, PhD

Photobiomodulation Promotes Tenogenic Fate in Adipose Mesenchymal Stem Cells in Three Dimensional Hydrogels

Reem Hanna, BDS, PhD, MSc, PG DipSed, PG DipHE, PG Cert AP, FAHE, FRSM, FIADFE, LPA (ALSP Cert)

Photobiomodulation Therapy of Orofacial Neuropathic Pain—Clinical Practice Guidelines and Consensus Using the HANNA Framework

Lilach Gavish, PhD, MPH

Photobiomodulation Combined with Dynamic Thermal Imaging: An Emerging Approach for Functional Assessment of Microvascular Responses

Nivaldo Parizotto, PT, PhD

Effects of Resistance Training With/Without Photobiomodulation on Muscle and Respiratory Function in Difficult-to-Control Asthma: A Randomized Trial

Anine Crous, PhD

Photobiomodulation Regulates Neural Organoid Formation from Adipose-Derived Stem Cells in a 3D Culture Model

Roberta Chow, MB BS (Hons) FRACGP M.Appl.Sci (Acu) PhD Grad Cert Pain M'ment

Mechanisms of Effectiveness of Photobiomodulation on Somatosensory Neurons and the Peripheral Nervous System

Paolo Cassano, MD, PhD

Photobiomodulation and Lasers: Are We Treating the Brain?

WALT/NAALT Speakers

Oral Presentation Speakers

Mohamed Yehya, BDS, MDS, PhD

Analgesic Outcomes of 650 nm Versus 810 nm Diode Laser Photobiomodulation After Dental Implant Placement in a Randomized Controlled Trial

Janina Golob Deeb, DMD, MS

Applications of PBM in Periodontal Practice: Case Series

Kody Newman, BS

EEG-Guided Photobiomodulation for Cognitive and Neuropsychiatric Outcomes: A Translational Clinical Approach

Zachary W. Sigman, BS

Assessment of Dose-Dependent Effects of 1064 nm Photobiomodulation Therapy on Human Tenocyte- and Bursa-Derived Cell Proliferation in Vitro

Ruth Phypers, MA

Photobiomodulation in Complex Female Infertility Profile: A Case Report with 12-Month Follow-Up and Review of Current Mechanism in Reproductive Photomedicine

Belinda Mandrell, PhD

Feasibility and Efficacy of Photobiomodulation in the Prevention and Treatment of Radiotherapy-Induced Oral Mucositis and Radiation Dermatitis

Lilach Gavish, PhD, MPH

Self-Applied Home-Use Photobiomodulation Reduces Pain in Patients with Knee Osteoarthritis: A Double-Blind Randomized Sham-Controlled Trial

Kate Perkins, B. App. Sci. (OT)

Photobiomodulation in Breast Cancer-Related Lymphoedema: Effects on Limb Volume and Quality of Life; Timing of Photobiomodulation in Head and Neck Radiotherapy: Impact on Radiation-Induced Fibrosis

Thais Azevedo Reis, MSc

Effects of Vascular Photobiomodulation as an Adjunct Therapy in the Treatment of Sickle Cell Disease: Impact on Pain, Vital Signs, and Hematology

Iasmym Mendes de Jesus, MSc

Impact of Photobiomodulation on Oral Mucositis, Pain, and Microbiota in Head and Neck Cancer Patients Undergoing Antineoplastic Therapy

Alan Kwong Hing, DDS, MSc

Artificial Intelligence as a Dosimetry Engine in Cross-Platform Photobiomodulation: Predictive Modeling and Adaptive Protocol Design

Lew Lim, PhD, MBA

Home-Based Intranasal and Transcranial PBM for Cognitive Dysfunction in Post-COVID Condition: Route-Specific Brain Effects of PBM and Control of Brain-State Dynamics: Intranasal and Transcranial PBM in TBI

Chandrashekar Yavagal, MDS, DORTh, PhD

Fast but Not Furious! Photobiomodulation Therapy in Alleviating Pain and Accelerating Orthodontic Tooth Movement in Children—A Systematic Review and Meta-Analysis

Karim Kleiber, MD

Observational Study on the Use of the PBM Lightforce Device in 227 Cases of Musculoskeletal Disorders: A 18 Months Follow Up

Saba Khan, DMD

Photobiomodulation Therapy for Management of Post-Treatment Dental Paresthesia: A Clinical Protocol and Case Series

Karla Estrada Rojas, MA, CCC-SLP

Improving Aphasia Outcomes with Transcranial Photobiomodulation Combined with Speech-Language Therapy: A Case Study

Liisa Laakso, B-Phty, PhD

Does PBM Reduce Impact of Extraintestinal Manifestions and Influence the Gut Microbiome in Young Adults with Inflammatory Bowel Disease?; PBMT for KOA Applications Using a Novel Wearable PBM Device

Blassan George, PhD

Optimizing Photobiomodulation to Enhance Smooth Muscle Differentiation of Adipose-Derived Stem Cells in a 2D Model

Venera Berisha-Muharremi, Prof. Assoc., MD, PhD

Photobiomodulation in Chronic Autoimmune Thyroiditis: Novel Glutathione Modulation in Early Disease and Clinical Outcomes

Violet V. Bumah, PhD

Mitochondrial Membrane Potential & Mitophagy as Modulators of Light Therapy

Lara Maria Bataglia Espósito, MSc, PT

Acute Effects of Whole-Body PBM on Blood Pressure in Individuals with Hypertension; Skin Temperature Changes Following Whole-Body PBM in Individuals with Hypertension

Farzad Salehpour

Transcranial 1064 nm Laser Photobiomodulation Improves Prefrontal Hemodynamic Response and Cognitive Function in Adults with ADHD

Magda Souza Viana, MSc

Effects of Photobiomodulation as Adjunctive Therapy on Pressure Ulcer Healing: A Randomized Clinical Study

Cleber Ferraresi, Prof.

Acute Effects of Whole-Body PBM on Glycaemic Control in Individuals with Diabetes Type 2; Whole-Body PBM in Individuals with Type 2 Diabetes Mellitus and Hypertension; Effect of PBM Therapy on Disability & Function in Low Back Pain

WALT/NAALT Speakers

Oral Presentation Speakers

Sathish Sundar Dhilip Kumar, PhD

Advances in Electrospun Nanofibrous Scaffolds and Photobiomodulation Therapy for Diabetic Wounds

James Carroll

The Effects of PBM on Heart Rate, HRV, VO2 Max, Sleep Quality, and Implications for Longevity and Health Span; Clinical and Economic Benefits of PBM for Oral Mucositis; Why I Do Not Believe Your Dose

Sara Ciurca, BS Biological Sciences

Optimizing Wound Healing Outcomes Utilizing Photobiomodulation Therapy

Reem Hanna, BDS, PhD, MSc, PG DipSed, PG DipHE, PG Cert AP, FAHE, FRSM, FIADFE, LPA (ALSP Certified)

Standardized PBM Dosimetry Enhances Bone Regeneration in Critical-Size Calvarial Defects; Targeting Oral Neuropathic Pain with PBM

Marggie Grajales Ramirez, DDS, MSc

Laser-Stimulated Human Gingival Fibroblasts: Alterations in Migration, Secretome Production, and Induction of Reactive Oxygen Species; PBM with 976 nm Diode Laser Enhances Osteoblastic Differentiation of Seos-2 Cells Cultured on Collagen Membranes

Roberta Chow, MB BS (Hons), FRACGP, M ApplSci (Med Acu), PhD, Cert Pain M'ment

904 nm Laser PBM Increases Mitochondrial Membrane Potential in Cell Bodies of Neonatal Dorsal Root Ganglion Neurons and Schwann Cells in Vitro

Daiane Meneguzzo, DDS, MSc, PhD

Non-Invasive Blood Photobiomodulation Reduces ASD Symptoms in Young Children: A Pilot Study

Brian Bicknell, PhD

Five-Year Follow-Up of PBM in Parkinson's Disease; Case Studies of the Use of PBMT for 7 Years

Dana York, DDS, MS, PhD, Clinical Teaching Degree Academy of Distinguished Educators

Photobiomodulation Future of Medicine

Denis J. Gendron, Physics PhD

Accelerated Reversal of Metabolic Syndrome with Adjunct Phototherapy

Pilar Blanco, MSc

Analysis of the Role of Dental Sleep Medicine in the Detection, Assessment, and Therapeutic Support of Patients with Obstructive Sleep Apnea; Diode Laser Assisted Facial Lifting: A New Technical and Case Report

Ann Liebert, PhD

Photobiomodulation in Kidney Disease: From Bench to Bedside

WALT/NAALT Thursday Program

Pre-Conference Educational Courses Speakers

René-Jean Bensadoun, MD, HRD

PBM in Supportive Care for Cancer

Reem Hanna, BDS, PhD, MSc, PG DipSed, PG DipHE, PG Cert AP, FAHE, FRSM, FIADFE, LPA (ALSP Certified)

PBM Applications in Dentistry & Orofacial Disorders

Nivaldo Parizotto, PT, MSc, PhD

PBM in Musculoskeletal Applications

Praveen Arany, PhD, DDS

PBM in Wound Care; Trials and Research Methodology

Lilach Gavish, PhD, MPH

PBM and the Mitochondria; PBM and the Microcirculation: Mechanism and Applications

Cleber Ferraresi, PT, MS, PhD

PBM in Musculoskeletal Applications

Juanita Anders, MS, PhD

PBM Applications in Dentistry and Orofacial Disorders

Liisa Laakso, BPhty, PhD

Trials and Research Methodology

Paolo Cassano, MD, PhD

PBM in Neurology

WALT/NAALT Workshops

AI-Guided Personalized Brain Intervention (PBI):
A Live Demonstration of Real-Time Adaptive Photobiomodulation

Lew Lim, PhD, MBA
Reza Zomorrodi, PhD
Sorenza P. Bastiaens, PhD

Until now, brain photobiomodulation (PBM) has generally relied on parameters selected manually before stimulation and then kept fixed during a session. However, biological responses can differ between individuals and may change over time. In medicine, treatment is often adjusted according to measured physiological responses. Personalized Brain Intervention (PBI) brings this feedback principle to brain PBM by measuring how an individual brain responds, selecting the next permitted PBM input based on that response, delivering it, and measuring again. EEG provides a non-invasive window into the brain's electrical activity, while AI assists in selecting among human-approved PBM settings.

This 3.5-hour, two-part workshop combines practical explanation, case discussion, and a live end-to-end demonstration with a consenting adult volunteer. Using Vielight AI and the programmable Neuro Pro platform, participants will observe the cycle repeat approximately every five seconds: recording EEG, assessing the current response, selecting from predefined PBM settings within human-set safety limits, delivering PBM, and remeasuring and adapting. The projected interface will display signal quality, the selected setting, loop count, and time-stamped responses. Presenters will explain, in clinically relevant terms, what EEG can and cannot show, how movement and other artifacts are managed, why human oversight remains essential, and how adaptive PBI should be compared with the best fixed protocol. No prior EEG or computational background is required.

By the end of the workshop, participants will understand how PBI differs from conventional fixed PBM, recognize the respective roles of EEG, AI, PBM, and human oversight, observe a complete adaptive loop in real time, and identify the scientific evidence required before clinical conclusions can be drawn.

PBI points to a potential next evolution of precision PBM: not simply delivering a preset dose of light, but creating a continuing, measurable dialogue between the intervention and the brain. Future systems may learn which wavelength, pulse frequency, intensity, timing, and delivery sites produce a desired measurable response in a particular brain, then refine that response profile across sessions. This approach could help the PBM field investigate individual variability, distinguish responders from non-responders, improve reproducibility, and design more informative clinical studies. The live demonstration is intended to show technical operation and the ability to measure and respond to selected EEG features; it does not establish clinical benefit, diagnosis, or superiority.

Participants will learn to explain PBI and distinguish it from manually selected, fixed PBM protocols; describe the live PBI cycle and the roles of EEG, AI, PBM, and human oversight; relate PBI to individual biological variability and the future of precision PBM; and identify the evidence needed to determine whether adaptive PBI is reproducible and clinically meaningful.

Thursday, October 15, 2026
1:30pm-5:30pm

PBM Beyond the Clinic: From Episodic Treatment to a Continuum of Care
Wearables, Digital Health, and Remote Therapeutic Monitoring

J. Chris Castel, PhD
Dawn S. Castel, PT, DPT
Violet Bumah, PhD
Roberto Pinelli, MD
Liisa Laakso, PT, PhD

Photobiomodulation is often delivered as an episodic in-clinic treatment, yet many applications depend on appropriate dose, treatment frequency, and consistency over time. This workshop explores how wearable PBM, digital health, and remote monitoring can extend treatment beyond the clinic while maintaining clinician oversight and continuity of care.

Faculty will examine the scientific basis for consistent PBM dosing, including wavelength, timing, treatment frequency, and repeated exposure. Discussion of mitochondrial metabolism and cellular response, together with antimicrobial and antiviral photobiology, will illustrate how biological mechanisms can inform dosing strategy and treatment design.

Selected applications in musculoskeletal care, postoperative rehabilitation, TMJ/TMD, and head and neck conditions will demonstrate how treatment can continue between visits while remaining integrated with the clinician's plan of care.

The workshop will also introduce Remote Therapeutic Monitoring—a digital health framework that enables clinicians to review treatment use, monitor patient response, communicate with patients, and support care delivered between visits. Participants will see how wearable therapy, treatment-use data, clinician reassessment, and remote monitoring can create a connected treatment pathway rather than a series of isolated visits. Hands-on demonstrations will show how wearable PBM and digital monitoring can extend clinician-directed care beyond the clinic while creating new opportunities for practice growth and reimbursable care.

Thursday, October 15, 2026
1:30pm-3:30pm

ALD® Academy of Laser Dentistry

THE POWER OF LIGHTS
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ALD® 33rd YEAR 1993-2026

THURSDAY, OCTOBER 15, 2026 | PRE-CONFERENCE

THURSDAY WORKSHOPS

8:00am-5:00pm — ***Standard Level Laser Training & Certification Course***

12:30-6:30pm — ***Mastering Frenectomy & Soft Tissue Surgery: A Complete Clinical System from Diagnosis to Long-Term Outcomes*** — Lawrence Kotlow, DDS

5:00-7:00pm — **Reception w/ Exhibits & Badge Pick-Up**

FRIDAY, OCTOBER 16, 2026

8:00-8:40am — **Keynote Lecture:** ***Recent Advances in Photobiomodulation: From Precision Personalized Care to Policy Updates*** — Praveen Arany, PhD, DDS

8:40-9:20am — **Keynote Lecture:** ***Innovative Flapless Periodontal Surgery Using Er:YAG Laser: Er-LCPT*** — Akira Aoki, DDS, PhD

9:20-10:00am — **Keynote Lecture:** ***Mastering the Parameters of PBM*** — Jan Tunér, DDS

10:00-10:30am — **Break**

10:30-10:50am — ***Using Lasers to Help Diagnose and Manage Auto-Immune Diseases*** — Laura Braswell, DDS

10:55-11:15am — ***Innovative Approaches in Managing Oral Biofilm and Periopathogens Using Laser Therapy*** — Kinga Grzech-Leśniak, Prof., DMD, MSc, PhD

11:20am-12:00pm — ***Lasers for the GP and Beyond*** — Larry Lieberman, DDS

12:00-12:30pm — ***When Evidence Falls Short: Rethinking How We Interpret Research in Laser Dentistry*** — Ali Obeidi, DDS, MSc, MS, FALD

12:30-1:00pm — **Membership Meeting**

1:00-2:00pm — **Lunch**

FRIDAY WORKSHOPS

2:00-6:00pm — ***Erbium: Chromium Laser Workshop*** — Marina Polonsky, DDS

2:00-6:00pm — ***Photobiomodulation in Dentistry*** — Grace Sun, DDS & Arun Darbar, DDS, MS

2:00-6:00pm — ***Oral Biopsies and the Roles Lasers and Light Technologies Play*** — Alfred Wyatt, DMD

SATURDAY, OCTOBER 17, 2026

DENTIST TRACK

8:00-8:40am — **Keynote Lecture:** ***The Systematic Effects of Photobiomodulation Therapy: A Review of Evidence For and Against*** — Juanita Anders, PhD

8:40-9:20am — **Keynote Lecture:** ***Advances in Laser-Assisted Regenerative Periodontal and Peri-Implant Plastic Surgery*** — Homa H. Zadeh, DDS, PhD

9:20-10:00am — **Keynote Panel:** ***The Evolving Role of PBM in Orofacial, Head, & Neck Care: Expert Roundtable....*** Drs. J. Chris Castiel, Praveen Arany, Chukuka S. Enwemeka, & Violet Vakunseh Bumah

10:00-10:30am — **Break**

10:30-10:50am — ***Use of Erbium Lasers for Debonding*** — Janina Golob Deeb, DMD, MS

10:55-11:15am — ***Laser-Assisted Implantology*** — Saleh Anvaria Aria, DDS, MSc

11:20-11:40am — ***Thermal Imaging—Monitored At-Home PBM Therapy for Orofacial Inflammatory Processes*** — Haitham Elafifi, DDS

11:45am-12:10pm — ***Every Procedure is a Laser Procedure!*** — Robin Horton, BDS, FALD, FWCLI

12:15-12:35pm — ***Laser Dentistry as a Transformative Educational Tool: Opportunities and Barriers in Academic Integration*** — Natalia Elson, DDS

12:40-1:00pm — ***Utilizing PBM to Treat Cancer Symptoms and Cancer Treatment Side Effects*** — Mel A. Burchman, DDS, MALD

1:00-2:00pm — **Lunch**

2:00-2:35pm — ***Integrated Photonics-Enhanced Precision Dentistry*** — Ambrose Chan, PhD, MSc, BDS, FRACDS, FICD

2:35-3:05pm — ***From Perforation to Preservation*** — Mohamed Yehya, DDS, PhD

3:05-3:35pm — ***Laser-Assisted Management of Severely Curved Canals to Prevent Ledge Formation*** — Md Arifur Rahman, BDS, MSc

3:35-4:00pm — **Break**

4:00-4:25pm — ***Bridging Chairside Laser Therapy and At-Home PBM*** — Alan Kwong Hing, DDS, MSc

4:25-4:45pm — ***Combination Laser Therapy—Effectively Using Multiple Wavelengths for Best Overall Treatment Results*** — Maki Tanaka, DDS, PhD

4:45-5:10pm — ***Laser-Induced Hypoxia of the Post-Extraction Socket to Preserve Bone Volume Without Grafting*** — Ernesto Vatteroni, DDS, PhD

DENTAL HYGIENIST TRACK

8:00-9:00am — ***Illuminating Precision: Understanding Laser Wavelengths in Dental Hygiene*** — Alfred Wyatt, DMD

9:00-10:00am — ***Deferring and Referring with Confidence*** — Erin Doffoney, RDH

10:00-10:30am — **Break**

10:30-11:30am — ***"Lighting the Way" Photobiomodulation for Healing, Pain, and Health in Hygiene*** — Lynn Atkinson, RDH

11:30am-1:00pm — ***TBD*** — Jodi Deming, RDH

1:00-2:00pm — **Lunch**

2:00-2:45pm — ***Are the Rules and Regulations for Lasers in Dental Hygiene Changing Again?*** — Angie Wallace, RDH

2:45-3:30pm — ***From Operatory to Educator: The RDH-to-Faculty Journey Through Laser Dentistry and Higher Education*** — Laurie Bricker, RDH, MS

3:30-4:00pm — **Break**

4:00-5:20pm — ***Periodontal Disease: The Oral Systemic Connection*** — Laura Braswell, DDS

SATURDAY WORKSHOPS

8:00am-5:00pm — ***Standard Level Laser Training & Certification Course***

2:00-6:00pm — ***Diode Laser Workshop: From Fundamentals to Immediate Clinical Implementation*** — Ali Obeidi, DDS, MSc, MS, FALD

2:00-6:00pm — ***Elevating Patient Care with Laser Dentistry*** — Larry Lieberman, DDS

2:00-6:00pm — ***CO_2 Laser Workshop*** — Georgios Romanos, Prof., Dr. med. dent., DDS, PhD

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THE POWER OF LIGHTS
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THURSDAY, OCTOBER 15, 2026 | PRE-CONFERENCE

7:30-8:00am..... **Registration**

THURSDAY EDUCATIONAL COURSES

8:00-10:00am..... **Room 1:** ***PBM in Supportive Care in Cancer*** ..... Prof. René-Jean Bensadoun
8:00-10:00am..... **Room 2:** ***PBM in Wound Care*** ..... Prof. Praveen Arany
8:00-10:00am..... **Room 3:** ***PBM Applications in Dentistry and Orofacial Disorders*** ..... Prof. Reem Hanna & Prof. Juanita Anders
8:00-10:00am..... **Room 4:** ***PBM and the Mitochondria*** ..... Dr. Lilach Gavish
10:00-10:30am..... **Break**
10:30am-12:30pm ..... **Room 1:** ***Trials and Research Methodology*** ..... Prof. Praveen Arany & Prof. Liisa Laakso
10:30am-12:30pm ..... **Room 2:** ***PBM in Musculoskeletal Applications*** ..... Prof. Nivaldo Parizotto & Prof. Cleber Ferraresi
10:30am-12:30pm ..... **Room 3:** ***PBM in Neurology*** ..... Prof. Paolo Cassano
10:30am-12:30pm ..... **Room 4:** ***PBM and the Microcirculation: Mechanism and Applications*** ..... Dr. Lilach Gavish
12:30-1:30pm ..... **Lunch**

THURSDAY WORKSHOPS

1:30-3:30pm ..... **Room 1:** ***AI-Guided Personalized Brain Intervention (PBI): A Live Demo of Real-Time Adaptive PBM*** ..... Drs. Lew Lim, Reza Zomorrodi, Sorenza Bastiaens
1:30-3:30pm ..... **Room 2:** ***PBM Beyond the Clinic: From Episodic Treatment to a Continuum of Care*** ..... Drs. J. Chris Castel, Dawn S. Castel, Violet Bumah, Roberto Pinelli, Liisa Laakso
3:30-4:00pm ..... **Break**
4:00-5:30pm ..... **Room 1:** ***AI-Guided Personalized Brain Intervention (PBI): A Live Demo of Real-Time Adaptive PBM*** ..... Drs. Lew Lim, Reza Zomorrodi, Sorenza Bastiaens

FRIDAY, OCTOBER 16, 2026

8:00-8:40am..... **Keynote Lecture:** ***Recent Advances in Photobiomodulation: From Precision Personalized Care to Policy Updates*** ..... Praveen Arany, PhD, DDS
8:40-9:20am..... **Keynote Lecture:** ***Innovative Flapless Periodontal Surgery Using Er:YAG Laser: Er-LCPT*** ..... Akira Aoki, DDS, PhD
9:20-10:00am..... **Keynote Lecture:** ***Mastering the Parameters of PBM*** ..... Jan Tunér, DDS
10:00-10:30am..... **Break**

FRIDAY PLENARY SESSION

Theme: From Mechanisms to Clinical Practice: Translating PBM Science into Evidence-Based Care

10:30-10:55am ..... ***Photobiomodulation at 660 nm Activates Wnt/β-Catenin Signalling & Enhances Wound Healing*** ..... Prof. Nicolette Houreld
10:55-11:20am..... ***Lucia Proprio: Rationalized Cell Lineage & Contextual PBM Responses for Optimal Clinical Treatment Outcomes*** ..... Prof. Praveen Arany
11:20-11:45am..... ***PBM in Cancer Supportive Care: Evidence-Based Indications, Clinical Applications, and Future Perspectives*** ..... Prof. René-Jean Bensadoun
11:45am-12:10pm ..... ***WALT Position Paper 2026: PBM Therapy for Orofacial Neuropathic Pain—The HANNA Framework*** ..... Prof. Reem Hanna
12:10-12:35pm ..... ***Photobiomodulation and Lasers: Are We Treating the Brain?*** ..... Dr. Paolo Cassano
12:35-1:30pm ..... **Lunch**
1:30-2:30pm ..... **WALT AGM—Members Only**

FRIDAY BREAKOUT ROOM SESSIONS

Room 1: PBM in Neurology & Brain Disorders—Part 1

2:30-2:45pm ..... ***Case Studies of the Use of PBM Therapy for 7 Years: Patient Commitment to Long-Term Therapy for Parkinson's Disease*** ..... Dr. Brian Bicknell
2:45-3:00pm ..... ***Transcranial 1064 nm Laser PBM Improves Prefrontal Hemodynamic Response & Cognitive Function in Adults with ADHD*** ..... Dr. Farzad Salehpour
3:00-3:15pm ..... ***Non-Invasive Blood Photobiomodulation Reduces ASD Symptoms in Young Children: A Pilot Study*** ..... Dr. Daiane Meneguzzo
3:15-3:30pm ..... ***Intranasal & Transcranial Photobiomodulation Traumatic Brain Injury: Translational & Clinical Evidence*** ..... Dr. Lew Lim

Room 2: PBM in Wound Healing

2:30-2:45pm ..... ***Advances in Electrospun Nanofibrous Scaffolds & Photobiomodulation Therapy for Diabetic Wounds*** ..... Prof. Sathish Sundar Dhilip Kumar
2:45-3:00pm ..... ***Laser-Stimulated Human Gingival Fibroblasts: Alterations in Migration, Secretome Production, & Induction of Reactive Oxygen Species*** .... Dr. Marggie Grajales Ramirez
3:00-3:15pm ..... ***Effects of Photobiomodulation as Adjunctive Therapy on Pressure Ulcer Healing: A Randomized Clinical Study*** ..... Dr. Magda Souza Viana
3:15-3:30pm ..... ***Optimizing Wound Healing Outcomes Using Photobiomodulation Therapy*** ..... Dr. Sara Ciurca

Room 3: PBM in Cardiology

2:30-2:45pm ..... ***Acute Effects of Whole-Body PBM on Blood Pressure in Individuals with Hypertension*** ..... Dr. Lara Maria Bataglia Espósito
2:45-3:00pm ..... ***Whole-Body PBM in Individuals with Type 2 Diabetes Mellitus & Hypertension*** ..... Prof. Cleber Ferraresi
3:00-3:15pm ..... ***Skin Temperature Changes Following Whole-Body PBM in Individuals with Hypertension*** ..... Dr. Lara Maria Bataglia Espósito
3:15-3:30pm ..... ***Effects of Vascular PBM as an Adjunct Therapy in the Treatment of Sickle Cell Disease: Impact on Pain, Vital Signs, & Hematology*** .... Dr. Thais Azevedo Reis
3:30-4:00pm ..... **Break**

Room 1: PBM in Neurology & Brain Disorders—Part 2

4:00-4:15pm ..... ***5-Year Follow-Up of PBM in Parkinson's Disease: A Case Series Exploring Clinical Stability & Microbiome Modulation*** ..... Dr. Brian Bicknell
4:15-4:30pm ..... ***Home-Based Intranasal & Transcranial PBM for Cognitive Dysfunction in Post-COVID Condition*** ..... Dr. Lew Lim
4:30-4:45pm ..... ***Improving Aphasia Outcomes with Transcranial PBM Combined with Speech-Language Therapy: A Case Study*** ..... Dr. Karla Estrada Rojas
4:45-5:00pm ..... ***Mitochondrial Membrane Potential & Mitophagy as Modulators of Light Therapy*** ..... Dr. Violet V. Bumah
5:00-5:15pm ..... ***Route-Specific Brain Effects of Photobiomodulation & Control of Brain-State Dynamics*** ..... Dr. Lew Lim
5:15-5:30pm ..... **Discussion & Session Closure**

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FRIDAY, OCTOBER 16, 2026

FRIDAY BREAKOUT ROOM SESSIONS

Room 2: PBM in Dentistry & Orofacial Disorders

4:00-4:15pm ..... *904 nm Laser PBM Increases Mitochondrial Membrane Potential in Cell Bodies of Neonatal Dorsal Root Ganglion Neurons & Schwann Cells in Vitro* ..... Dr. Roberta Chow
4:15-4:30pm ..... *Photobiomodulation Future of Medicine* ..... Prof. Dana York
4:30-4:45pm ..... *Fast but Not Furious! PBM Therapy in Alleviating Pain & Accelerating Orthodontic Tooth Movement in Children* ..... Prof. Chandrashekar Yavagal
4:45-5:00pm ..... *Applications of Photobiomodulation in Periodontal Practice: Case Series* ..... Dr. Janina Golob Deeb
5:00-5:15pm ..... *Analgesic Outcomes of 650 nm vs. 810 nm Diode Laser PBM After Dental Implant Placement* ..... Dr. Mohamed Yehya
5:15-5:30pm ..... *PBM Therapy for Management of Post-Treatment Dental Paresthesia: A Clinical Protocol & Case Series* ..... Dr. Saba Khan

Room 3: PBM in Supportive Care in Cancer

4:00-4:15pm ..... *Feasibility & Efficacy of PBM in the Prevention & Treatment of Radiotherapy-Induced Oral Mucositis & Radiation Dermatitis* ..... Dr. Belinda Mandrell
4:15-4:30pm ..... *Targeting Oral Neuropathic Pain with PBM: Mechanisms, Clinical Applications, & Implementation in Cancer Supportive Care* ..... Prof. Reem Hanna
4:30-4:45pm ..... *PBM in Breast Cancer-Related Lymphoedema: Effects on Limb Volume & Quality of Life* ..... Dr. Kate Perkins
4:45-5:00pm ..... *Impact of PBM on Oral Mucositis, Pain, & Microbiota in Head & Neck Cancer Patients Undergoing Antineoplastic Therapy* ..... Dr. Iasmym Mendes de Jesus
5:00-5:15pm ..... *Clinical & Economic Benefits of PBM for Oral Mucositis: Reduced Pain, Opioid Use, Hospitalisation, & Cost* ..... Mr. James Carroll
5:15-5:30pm ..... *Timing of Photobiomodulation in Head & Neck Radiotherapy: Impact on Radiation-Induced Fibrosis* ..... Dr. Kate Perkins

SATURDAY, OCTOBER 17, 2026

8:00-8:40am ..... **Keynote Lecture:** *The Systematic Effects of Photobiomodulation Therapy: A Review of Evidence For and Against* ..... Prof. Juanita Anders
8:40-9:20am ..... **Keynote Lecture:** *Advances in Laser-Assisted Regenerative Periodontal and Peri-Implant Plastic Surgery* ..... Dr. Homa H. Zadeh
9:20-10:00am ..... **Keynote Panel:** *The Evolving Role of PBM in Orofacial, Head, & Neck Care* ..... Drs. J. Chris Castiel, Praveen Arany, Chukuka S. Enwemeka, & Violet Bumah
10:00-10:30am ..... **Break**

SATURDAY PLENARY SESSION

Theme: Advancing Precision PBM: Innovation, Regeneration, & Intelligent Clinical Translation

10:30-10:55am ..... *Effects of Resistance Training With/Without PBM on Muscle & Respiratory Function in Difficult-to-Control Asthma* ..... Prof. Nivaldo Parizotto
10:55-11:20am ..... *Artificial Intelligence as a Framework for Precision Photobiomodulation Dosing* ..... Prof. Liisa Laakso
11:20-11:45am ..... *Photobiomodulation Promotes Tenogenic Fate in Adipose Mesenchymal Stem Cells in Three Dimensional Hydrogels* ..... Prof. Heidi Abrahamse
11:45am-12:10pm ..... *PBM Combined with Dynamic Thermal Imaging: An Emerging Approach for Functional Assessment of Microvascular Responses* ..... Dr. Lilach Gavish
12:10-12:35pm ..... *Photobiomodulation Regulates Neural Organoid Formation from Adipose-Derived Stem Cells in a 3D Culture Model* ..... Prof. Anine Crous
12:35-1:00pm ..... *Mechanisms of Effectiveness of PBM on Somatosensory Neurons & The Peripheral Nervous System* ..... Dr. Roberta Chow
1:00-2:00pm ..... **Lunch**

SATURDAY BREAKOUT ROOM SESSIONS

Room 1: PBM in Basic Science

2:00-2:15pm ..... *Standardized PBM Dosimetry Enhances Bone Regeneration in Critical-Size Calvarial Defects: Influence of Beam Profile & Bio-Oss®* ..... Prof. Reem Hanna
2:15-2:30pm ..... *Optimizing PBM to Enhance Smooth Muscle Differentiation of Adipose-Derived Stem Cells in a 2D Model* ..... Prof. Blassan George
2:30-2:45pm ..... *Assessment of Dose-Dependent Effects of 1064 nm PBM Therapy on Human Tenocyte- & Bursa-Derived Cell Proliferation in Vitro* ..... Mr. Zachary W. Sigman
2:45-3:00pm ..... *PBM with 976 nm Diode Laser Enhances Osteoblastic Differentiation of Saos-2 Cells Cultured on Collagen Membranes* ..... Dr. Marggie Grajales Ramirez
3:00-3:15pm ..... *Artifical Intelligence as a Dosimetry Engine in Cross-Platform PBM: Predictive Modeling & Adaptive Protocol Design* ..... Dr. Alan Kwong Hing
3:15-3:30pm ..... *Near-Infrared PBM Therapy Improves Brain & Cardiovascular Function & Heart-Brain Communication in a Mouse Model of Alzheimer's Disease* ..... Dr. Olga Fedorova

Room 2: PBM Metabolic & Endocrine Disorders

2:00-2:15pm ..... *Does PBM Reduce Impact of Extraintestinal Manifestations & Influence the Gut Microbiome in Young Adults with Inflammatory Bowel Disease?* ..... Prof. Liisa Laakso
2:15-2:30pm ..... *Photobiomodulation in Kidney Disease: From Bench to Bedside* ..... Dr. Ann Liebert
2:30-2:45pm ..... *PBM in Chronic Autoimmune Thyroiditis: Novel Glutathione Modulation in Early Disease & Clinical Outcomes* ..... Prof. Venera Berisha-Muharremi
2:45-3:00pm ..... *Acute Effects of Whole-Body PBM on Glycaemic Control in Individuals with Diabetes Type 2* ..... Prof. Cleber Ferraresi
3:00-3:15pm ..... *Accelerated Reversal of Metabolic Syndrome with Adjunct Phototherapy* ..... Dr. Denis J. Gendron
3:15-3:30pm ..... **Closing Remarks**
3:30-4:00pm ..... **Break**

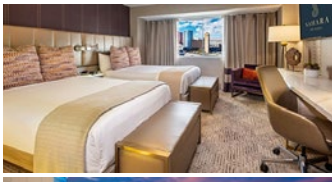
Room 1: PBM in Musculoskeletal Applications

4:00-4:15pm ..... *Photobiomodulation Therapy for Knee Osteoarthritis (KOA) Applications Using a Novel Wearable PBM Device* ..... Prof. Liisa Laakso
4:15-4:30pm ..... *Self-Applied Home-Use Photobiomodulation Therapy Reduces Pain in Patients with Knee Osteoarthritis* ..... Dr. Lilach Gavish
4:30-4:45pm ..... *Effect of Photobiomodulation Therapy on Disability and Function in Low Back Pain* ..... Prof. Cleber Ferraresi
4:45-5:00pm ..... *Observational Study on the Use of PBM Lightforce Device in 227 Cases of Musculoskeletal Disorders: An 18-Month Follow-Up* ..... Dr. Karim Kleiber
5:00-5:15pm ..... *Photobiomodulation in Diabetes: Targeting Neurovascular Dysfunction for Tissue Regeneration* ..... Dr. Victória Regina da Silva Oliveira

Room 2: PBM in Health, Performance, Longevity

4:00-4:15pm ..... *The Effects of PBM on Heart Rate, Heart Rate Variability, VO_2 Max, Sleep Quality, & Implications for Longevity & Health Span* ..... Mr. James Carroll
4:15-4:30pm ..... *PBM in Complex Female Infertility Profile: A Case Report with 12-Month Follow-Up & Review of Current Mechanism in Reproductive Photomedicine* ..... Ms. Ruth Phypers
4:30-4:45pm ..... *Diode Laser Assisted Facial Lifting: A New Technical & Case Report* ..... Dr. Pilar Blanco
4:45-5:00pm ..... *Why I Do Not Believe Your Dose: Beam Power, Beam Area, Irradiance, & Reproducibility in Photobiomodulation* ..... Mr. James Carroll
5:00-5:15pm ..... *Analysis of the Role Dental Sleep Medicine in the Detection, Assessment, & Therapeutic Support of Patients with Obstructive Sleep Apnea* ..... Dr. Pilar Blanco
5:15-5:30pm ..... **WALT Award for Best Young Investigator Presentation**

VENUE INFORMATION



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	Member Rate Early Bird: By July 1	*Member Rate By October 14*	*Non-Member Rate Early Bird: By July 1*	*Non-Member Rate By October 14*
Doctor/Researcher/Scientist/Recent Grad	☐ $795	☐ $895	☐ $945	☐ $995
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Single Day Rate (Friday or Saturday)

	Member Rate Friday	*Member Rate Saturday*	*Non-Member Rate Friday*	*Non-Member Rate Saturday*
Dentists	☐ $495	☐ $495	☐ $595	☐ $595
RDH	☐ $295	☐ $295	☐ $345	☐ $345

Workshops

Mastering Frenectomy & Soft Tissue Surgery: Thursday, October 15	☐ $795
Lasers for the GP and Beyond: Saturday, October 17	☐ $495

WALT/NAALT Pricing

Full Conference Registration

	Member Rate Early Bird: By July 1	*Member Rate By October 14*	*Non-Member Rate Early Bird: By July 1*	*Non-Member Rate By October 14*
Full Registration	☐ $795	☐ $895	☐ $945	☐ $995
Student Registration	☐ $150	☐ $150	☐ $245	☐ $245

Registration Form

Name: _____

Email: _____ Phone: _____

Address: _____

City, State, Zip: _____

Payment by check is preferred; however, credit cards are accepted.
Enclosed is a check for the amount of (or process our payment in the amount of) $_____

Credit Card #: _____ Exp. Date: _____

Cardholder's Name: _____ 3-digit Security Code: _____

Cardholder's Billing Address: _____

Cardholder's Signature: _____

Fill out form and send to: Academy of Laser Dentistry, 15436 N Florida Ave, Suite 102, Tampa, FL 33613
Office Phone: 813.444.1011

Or Register at: **laserdentistry.org**