WALT
WORLD ASSOCIATION FOR PHOTOBIOMODULATION THERAPY

NAALT
North American Association for PhotobiomoduLation Therapy

# THE POWER OF LIGHTS
## In Las Vegas
# SCHEDULE AT A GLANCE

## 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**