# **OSA Incubator Low Level Light Therapy: the Path Forward**

#### 20-22 August

OSA Headquarters • 2010 Massachusetts Ave. NW • Washington, DC, USA

#### **HOSTED BY:**

Juanita Anders, Uniformed Services University of the Health Sciences; Praveen Arany, National Institute of Health; James Carroll, THOR Photomedicine Ltd; Michael R Hamblin, Harvard Medical School; Donald E. Patthoff, DDS

#### **AGENDA**

### Wednesday, 20 August 2014

18:00 **Welcome Dinner** 

Ezme, 2016 P Street, NW

### Thursday, 21 August 2014

8:00 **Breakfast** 

OSA Headquarters, 2010 Massachusetts Ave., NW

8:30 Welcome

Elizabeth Rogan, Chief Executive Officer, OSA, USA

8:45 Overview of the Goals of the Incubator

Juanita Anders, Uniformed Services University of the Health Sciences, USA

Michael R Hamblin, Harvard Medical School, USA

9:00 **History of Low Level Light Therapy** 

Howard Schlossberg, Air Force Office of Scientific Research (rtd), USA

#### **BASIC MECHANISMS SESSION**

9:20 Biological Chromophores, Action Spectra vs Absorption Spectra, Wavelength &

**Target Tissue** 

Juanita Anders, Uniformed Services University of the Health Sciences, USA

9:50 Activation of Growth Factor Complex Leads to Therapeutic Benefits of Laser

**Photobiomodulation on Stem Cells** 

Praveen Arany, National Institute of Health, USA

### Thursday, 21 August 2014, continued

10:20 Mitochondria, Reactive Oxygen Species & Activation of Transcription Factors
 Mike Hamblin, Harvard Medical School, USA
 10:50 Group Discussion
 11:20 Break

### **INTRODUCTION TO SOCIAL & ETHICAL ISSUES SESSION**

11:50 Panel: The Contrasting Impacts of Professional Ethics and Market-Based Thinking on the Commitments of Professional Health Organizations

Moderator: Don Patthoff, DDS, USA

Speaker: David Ozar, Loyola University Chicago, USA

Panel members: Gail Siminovsky, Academy of Laser Dentistry, USA

Scott Benjamin, Advanced Integration & Mentoring, USA

12:50 Lunch, provided

#### **PRE-CLINICAL SESSION**

13:50	Transcranial LLLT for Traumatic Brain Injury & Beyond Mike Hamblin, Harvard Medical School, USA
14:20	Low Level Light Therapy for Autoimmune Demyelination: Observations & Considerations
	Jeri-Anne Lyons, University of Wisconsin-Milwaukee, USA
14:50	Exploring Photobiomodulation Dose Regimens Via Optimization of Preclinical In Vitro and Animal Models
	Praveen Arany, National Institute of Health, USA
15:20	Group Discussion
15:50	Break

# **DEVICES/DOSIMETRY SESSION**

16:10	Devices, Measurement Problems and Reliability  James Carroll, THOR Photomedicine Ltd, USA
16:40	Dosimetry: Separating Fact & Fiction: The Scientific Basis for Current Wavelength & Dose Recommendations  Juanita Anders, Uniformed Services University of the Health Sciences, USA
17:10	Laser Penetration & the Thrills and Spills of an LLLT/PBM Startup Clark Tedford, LumiThera, Inc., USA
17:40	Group Discussion
18:10	Dinner Sette Osteria, 1666 Connecticut Avenue, NW

# Friday, 22 August 2014

8:00 Breakfast

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# **CLINICAL EXPERIENCES/APPLICATION SESSION**

8:30	Clinical Use of Low Level Light Therapy: A Focus on Pain (via weblink) Roberta Chow, Australian Medical Laser Association, Australia
9:00	Research with Transcranial LED to Improve Cognition in Chronic, TBI Margaret Naeser, VA Boston Healthcare System, USA
9:30	Why is LLLT/PBM Not a Routine Treatment for Oral Mucositis in the USA?  Nathaniel Treister, Brigham and Women's Hospital, USA
9:45	How We Adopted LLLT/PBM for Cancer Therapy Side-effects Annette Quinn, University of Pittsburgh, USA
10:00	Group Discussion
10:30	Break

### **SOCIAL & ETHICAL ACTIONS SESSION**

11:05	Towards Developing a Consensus on Professional Commitments for a New Collaborative Initiative in Health Care  Moderator: Don Patthoff, DDS, USA Speaker: David Ozar, Loyola University Chicago, USA Panel members: Clark Tedford, LumiThera, Inc., USA Allan Gardiner, PhotoMed Technologies, Inc., USA
11:30	Group Discussion
12:00	Lunch, provided

Moderated by the Hosts

**Group Discussion** 

Where do we want to go?

What do we need to get us there?

15:30 Adjourn

13:00