

Photobiomodulation – West 212A-C

3:45 pm – 6:00 pm

Directors: *Juanita J. Anders, Ph.D., Michael R. Hamblin, M.D.*

PHOTOBIMODULATION: PRECLINICAL STUDIES OF LIGHT THERAPY FOR CENTRAL AND PERIPHERAL NERVOUS SYSTEM INJURY, AND PHOTOACTIVATED ANTIMICROBIAL COLLAGEN

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| 3:45 pm – 3:54 pm | 175 | <p>TRANSCRANIAL LOW LEVEL LIGHT THERAPY FOR TRAUMATIC BRAIN INJURY: <i>IN VITRO</i> AND <i>IN VIVO</i> STUDIES</p> <p><i>Michael R. Hamblin¹, QiuHe Wu, Ying-Ying Huang, Aaron C-H Chen, Massachusetts General Hospital, Wellman Center for Photomedicine, Boston, MA</i></p> |
| 3:55 pm – 3:59 pm | | <p>Discussion</p> <p><i>¹Equipment from PhotoThera; consulting fees and research grant from Lexington International, equity position with Transdermal LaserCap; research grant from Palomar</i></p> <p><i>•Content discusses non-FDA approved device or off-label use</i></p> |
| 4:00 pm – 4:09 pm
<i>(ePoster Available)</i> | 176 | <p>NEAR-INFRARED LIGHT TREATMENT IN AN <i>IN VITRO</i> MODEL OF TRAUMATIC BRAIN INJURY</p> <p><i>Harry Whelan, Michele Henry, Colleen Maroney, Ellen Buchmann, Medical College of Wisconsin, Milwaukee, WI</i></p> |
| 4:10 pm – 4:14 pm | | <p>Discussion</p> <p><i>•Content discusses non-FDA approved device or off-label use</i></p> |
| 4:15 pm – 4:24 pm | 177 | <p>DEVELOPMENT AND PRECLINICAL TRIAL OF PHOTOACTIVATED ANTIMICROBIAL COLLAGEN FOR WOUND CARE IN A MURINE MODEL</p> <p><i>Raymond Lanza fame¹, Istvan Stadler², Ryan Cunningham, Jennifer Kasaraneni, Fred Khan, Barbara Soltz³, Robert Soltz³, Rochester General Hospital, Rochester, NY, Conversion Energy Enterprises, Spring Valley, NY</i></p> |
| 4:25 pm – 4:29 pm | | <p>Discussion</p> <p><i>¹Equipment from Carestream Health, Conversion Energy Enterprises, Patholase; consulting fees from LaserCure, PhotoThera; travel expenses and intellectual property rights with Conversion Energy Enterprises; research grant from NIH NIGM grant #1R43GM087753-01, Patholase; honoraria from ASLMS, SLS, Vermont Managed Care Association</i></p> <p><i>²Research grant from NIH NIGM grant #1R43GM087753-01, Patholase</i></p> <p><i>³Salary and intellectual property rights with Conversion Energy Enterprises; research grant from NIH NIGM grant #1R43GM087753-01, Patholase</i></p> <p><i>•Content discusses non-FDA approved device or off-label use</i></p> |
| 4:30 pm – 4:39 pm | 178 | <p>LIGHT THERAPY IMPROVES FUNCTIONAL OUTCOME IN AN AUTOGRAFT REPAIRED PERIPHERAL NERVE</p> <p><i>Helina Moges, Xingjia Wu, Jennifer McCoy, Juanita Anders, Uniformed Services University of the Health Sciences, Bethesda, MD</i></p> |
| 4:40 pm – 4:44 pm | | <p>Discussion</p> <p><i>•Content discusses non-FDA approved device or off-label use</i></p> |

- 4:45 pm - 4:54 pm 179 **COMPARABLE EFFECTS OF PULSED AND CONTINUOUS WAVE LIGHT ON AXONAL REGENERATION IN A RAT MODEL OF SPINAL CORD INJURY**
Xingjia Wu, Helina Moges¹, Christopher Tarney, Luis DeTaboada², Jackson Streeter², Juanita Anders³, Uniformed Services University of the Health Sciences, Bethesda, MD, PhotoThera, Carlsbad, CA
- 4:55 pm - 4:59 pm **Discussion**
¹Salary from PhotoThera
²Stockholder with PhotoThera
³Equipment, research grant, royalties, and intellectual property rights with PhotoThera
•Content discusses non-FDA approved device or off-label use
- 5:00 pm - 5:09 pm 180 **LED PHOTOMODULATION: EFFECTS OF DIFFERENT WAVELENGTHS AND DELIVERY MODES ON SELECTED HUMAN CELL TYPES *IN VITRO***
D.H. McDaniel¹, C. Mazur, S. Wilson, R.G. Geronemus², R.A. Weiss², M. Weiss², Laser Skin & Vein Center of Virginia, Institute of Anti-Aging Research, Virginia Beach, VA, Laser & Skin Surgery Center of New York, New York, NY, Maryland Laser Skin & Vein Institute, Hunt Valley, MD
- 5:10 pm - 5:14 pm **Discussion**
¹Equipment, discount, consulting fees and research grant from Light BioScience; consulting fees, stockholder, equity position, and intellectual property rights with GentleWaves II
²Equipment and discount from Light BioScience; stockholder and equity position with GentleWaves II
•Content discusses non-FDA approved device or off-label use
- 5:15 pm - 5:24 pm 181 **DESIGN, DEVELOPMENT AND EVALUATION OF FIBER OPTIC PROBE BASED HeNe LOW LEVEL LASER THERAPY SYSTEM FOR TISSUE REGENERATION**
Vijendra Prabhu, Bola Sadashiva Satish Rao, Nageshwar Rao, Kiran Aithal, Pramod Kumar, Krishna Kishore Mahato, Manipal University, Manipal, India
(ePoster Available)
- 5:25 pm - 5:29 pm **Discussion**
•Content discusses non-FDA approved device or off-label use
- 5:30 pm - 5:39 pm 182 **COMPARING LASER EVOKED ELECTROMYOGRAPHIC POTENTIAL USING CO₂ AND 1450nm DIODE LASER**
Jui-Teng Lin, Yu-Ling Hong, Pen-Li Lu, Fu-Shan Jaw, Chen-Tung Yen, National Taiwan University, Taipei, Taiwan
- 5:40 pm - 5:44 pm **Discussion**
•Content discusses non-FDA approved device or off-label use

LATE-BREAKING ABSTRACT

- 5:45 pm - 6:00 pm 183 **A HIGHLY EFFECTIVE NEW MICROSPOT-BASED IR-LASER FOR HOME USE SKIN REJUVENATION - A RANDOMIZED, DOUBLE-BLINDED, PROSPECTIVE ULTRASONOGRAPHIC STUDY**
Peter Bjerring¹, Kaare Christiansen¹, Molholm Research, Vejle, Denmark
¹Research grant from Intenzity Innovation
Content discusses non-FDA approved device or off-label use