



#aslms2016

ASLMS 2016 CONFERENCE PROGRAM

*Complete Educational Information
Including: Courses, Workshops and
Sessions*

Sheraton Boston Hotel & Hynes Convention Center

Pre-Conference | March 30 - March 31

Conference | April 1-3

Exhibits | April 1-2

Visit aslms.org for details

A stylized graphic of a bridge with two orange towers and a dark blue deck, set against a light blue background with a dark blue wavy base representing water. The bridge is positioned horizontally across the lower half of the page.

★ASLMS★
Boston

36TH ANNUAL CONFERENCE

MARCH 30 - APRIL 3, 2016

Pioneering the future of energy-based science and medicine

WELCOME.....	3
SPECIAL EVENTS & EXHIBIT HALL.....	4
PLENARY SESSION SPEAKERS	5
PLENARY SESSION AWARDS.....	6-9
MAPS.....	10-13
GENERAL INFORMATION.....	14-15
WHO'S WHO AT ASLMS 2016	16-19
PROGRAM-AT-A-GLANCE.....	20-21
WEDNESDAY, MARCH 30, 2016	
» Fundamentals of Lasers in Health Care Course	22-23
THURSDAY, MARCH 31, 2016	
» Expert Treatment Approaches Course.....	24
» Pediatric Laser Focus Course	25
» Nursing/Allied Health Course	26-27
» Fractional Resurfacing Masters Luncheon	28
» Neck Rejuvenation Masters Luncheon.....	29
» Our Favorite Laser Pearls Masters Luncheon	30
» PDT: State-of-the-Art Masters Luncheon.....	31
» State-of-the-Art in Tattoo Treatment Masters Luncheon.....	32
» What's New in Lasers/Energy-Based Devices Masters Luncheon	33
» Combining Injectables with Lasers, Lights and Energy-Based Devices Course	34
» Device-Based Resurfacing, Rejuvenation and Recontouring Course	35
FRIDAY, APRIL 1, 2016	
» Cellulite Breakfast Session.....	36
» Optimizing Patient Experience Breakfast Session.....	37
» Scar Wars Breakfast Session.....	38
» Safety Compliance in the Practice Environment Workshop.....	39
» ASLMS/ALD – Laser Dental Applications Workshop	40
» Complications, Legal Issues, and Laser Safety Workshop	41
» Gynecologic and Cutaneous Therapeutic Challenges and New Treatments Workshop	42
» Plenary Session	43
» ASLMS/ALD – Laser Dental Session	44-45
» ASLMS/PAPDT – PDT Session	46-47
» Basic Science & Translational Research Session	48-49
» Cutaneous Applications Session.....	50-52
» Photobiomodulation Session	53-54
» Tech Connect - Non-CME Session.....	55
» Celebration of ASLMS Women in Energy-Based Devices	56
SATURDAY, APRIL 2, 2016	
» Basic Mechanisms of Photobiomodulation Workshop	57
» Laser Assisted Drug Delivery Workshop	58
» Non-Invasive Body Contouring Options Workshop	59
» Periorbital Therapies and Rejuvenation Workshop	60
» ASLMS/HNODIS – Optical Diagnostics I Session	61-62
» Emerging Energy-Based Device Applications in Gynecology Session.....	63
» ASLMS/NAALT – Veterinary Applications Session.....	64
» Cutting Edge: Laser and Skin Session.....	65
» Clinical and Career Pearls for Residents/Fellows and Energy-Based Device Novices Session.....	66
» ASLMS/PAPDT – PDT Session	67-68
» Basic Science and Translational Research Session	69-70
» Cutaneous Applications Session.....	71-73
» ASLMS/HNODIS – Optical Diagnostics II Session.....	74
» ASLMS/NAALT – Physical Medicine and Rehabilitation Session.....	75
» Photobiomodulation Session	76-77
» Ask Me Anything.....	78
» Women's Health Session.....	79-80
» ASLMS/HNODIS – Photodynamic Therapy Session.....	81-82
SUNDAY, APRIL 3, 2016	
» Early Career Abstracts Session.....	83-86
» Cutaneous Applications Session.....	87-89
» Basic Science and Translational Research Session	90-91
» Biological Imaging Session.....	92
» Luminary Rapid Fire Laser and Energy Pearls Session.....	93
CONTINUING EDUCATION INFORMATION.....	94-102
FACULTY/SPEAKER CONFLICT OF INTEREST DISCLOSURE.....	103-121
ABSTRACTS/EPOSTERS.....	Back of Program

On behalf of the 2016 Conference Planning Committee, it is our pleasure to welcome you to Boston and the 36th Annual Conference of the American Society for Laser Medicine and Surgery. The program committee, session directors, and staff have worked diligently to put together an outstanding program. Our hope is for you to leave the meeting energized and armed with new knowledge that contributes to excellence in patient care.

This is an exciting time for our field, as research and development is rapidly expanding in new and diverse directions. Our keynote speaker, Robert S. Afzal, PhD, a pioneer in fiber laser development, will bring us to the very tip of cutting edge research when he addresses how fiber lasers transforming military applications today could lead to new treatments in medicine in the future.

The conference reflects our diversity by bringing in new programming that will appeal to a broad range of disciplines. As you page through the program, you will find many new topics, sessions, and faculty members. While some topics may not seem to apply to you, consider how the sharing of research and ideas in other areas can spark innovations in your own specialty. We highly encourage your exploration of the wide variety of offerings.

New for 2016 is a focus on emerging applications of energy-based devices in women's health. With the many advancements in this area, this is the ideal time to give these technologies a home in the ASLMS.

In the spirit of collaboration, we continue to build relationships with other societies:

- » Our collaboration with NAALT (North American Association for Light Therapy) continues strong, this

year with two sessions, Veterinary Applications and Physical Medicine and Rehabilitation.

- » PAPDT (PanAmerican Photodynamic Association) is offering a series of PDT sessions, joining forces to present the best new research in Photodynamic Therapy.
- » Last year's collaboration with the Academy for Laser Dentistry (ALD) was successful and again this year, the Laser Dental Applications Workshop and Abstract Session will explore the widespread adoption of energy based devices in dentistry.
- » We welcome HNODIS, the Head and Neck Optical Diagnostic and Intervention Society, offering abstract sessions in Optical Diagnostics and Photodynamic Therapy.

Our core educational offerings this year are strong as well. The latest research and clinical applications will be presented in the areas of Cutaneous Applications, Photobiomodulation, Nursing/Allied Health, Basic Science and Translational Research and Biological Imaging. And as usual, there is a strong emphasis on Safety and Compliance.

Please note that complete information about our sponsors, exhibits, speakers, special events and awards is now located in our non-CME Conference Guide, **explore:connect**. Keep both publications on hand during the conference. More of the mobile type? Don't forget to download or update the ASLMS mobile app which contains complete conference information as well.

Thank you for joining us in Boston. We hope you have a wonderful and valuable time at the conference.



Robert A. Weiss, MD
ASLMS President



Jeremy B. Green, MD
ASLMS 2016 Co-Chair



Ashish C. Bhatia, MD, FAAD
ASLMS 2016 Co-Chair



Ron R. Allison, MD
ASLMS 2016 Co-Chair

Special Events

PLENARY SESSION

Join the current ASLMS President, Robert A. Weiss, MD, for a conference welcome and Presidential address, introduction of the 2016 Program Chairs, Presidential Citations, honorary award and abstract award recipient announcements, special presentations, and Keynote Speaker, Robert Afzal, PhD.

Friday, April 1 | 10:30 AM - 12:00 PM | Hynes Auditorium

TECH CONNECT – NON-CME

This popular and energized session has been moved to Friday evening to allow for easier access for all conference attendees. Listen and share feedback as this expert panel discusses their personal procedural and device preference, what works and how/why devices/techniques are used.

Friday, April 1 | 4:45 PM - 7:15 PM | Hynes Auditorium

CELEBRATION OF ASLMS WOMEN IN ENERGY-BASED DEVICES

Join us for the exciting evening of networking and inspiration at the 2nd annual Celebration of ASLMS Women in Energy-Based Devices! Panelist presentations and round table sessions offer opportunities to expand your knowledge and connect with peers, students, residents, fellows, early career scientists, and mentors. A light reception of hors d'oeuvres and beverages will be available during the event. All conference attendees are welcome!

Friday, April 1 | 7:30 PM - 9:30 PM | Sheraton Republic Ballroom

ASK ME ANYTHING – NON-CME

Hosted by Robert A. Weiss, MD and Tina S. Alster, MD in the exhibit hall, this event provides attendees with the opportunity to listen to and participate in an open discussion and question/answer session. Inquiries may focus on devices, clinical approaches, and personal recommendations for practice.

Saturday, April 2 | 2:45 PM - 3:30 PM | Hynes Hall A

EXHIBITOR RECEPTION | SILENT AUCTION

ASLMS will host its 11th annual Silent Auction to support research grants. Stop by for your last chance to bid on some fantastic items. Bidding closes at 6:30 PM followed by the names of the winners.

In addition to the Silent Auction, we will be hosting an Exhibitor Reception. Come grab a bite to eat and a beverage. It's your last opportunity to visit the exhibit booths and mingle with the exhibitors before they close and head home.

Saturday, April 2 | 5:30 PM - 7:00 PM | Hynes Halls A & B

EARLY CAREER RECEPTION

This special reception offers students, residents, fellows, early career scientists and nursing/allied health specialists an opportunity to meet and network. Attendees can enjoy complimentary hors d'oeuvres, and bar/beverages and share excellent conversation with peers.

Saturday, April 2 | 7:30 PM - 9:00 PM | Sheraton Constitution Ballroom B

Exhibit Hall

In addition to the over 100 exhibit booths showcasing new technologies and applications that enhance patient care, you will find twenty ePoster viewing stations, beverage centers, and the Silent Auction – where you can bid on new medical laser equipment and supplies. Special “Exhibitor Breaks” are scheduled from 10:00 AM - 10:30 AM and 2:15 PM - 3:00 PM on Friday and from 9:00 AM - 9:30 AM and 2:45 PM - 3:30 PM on Saturday. Educational sessions on both Friday and Saturday will be adjourned during these times.

Don't miss out on a great opportunity to win some cash! Special drawings for \$1,000 each will be held in the exhibit hall during lunch and breaks, but you must be present to win.



Keynote Speaker

HIGH POWER LASERS

ROBERT AFZAL, PHD

Senior Fellow, Lockheed Martin: Mission Systems & Training – Ship and Aviation Systems | Bothell, WA

“Directed Energy Lasers: Near the Tipping Point”



Special Speaker

DR. HORACE FURUMOTO INNOVATIONS PROFESSIONAL DEVELOPMENT YOUNG INVESTIGATOR AWARD RECIPIENT

PRAVEEN ARANY DDS, PHD

Assistant Clinical investigator, National Institute of Dental and Craniofacial Research, National Institutes of Health | Bethesda, MD

“Low Dose Clinical Biophotonics: Molecular Mechanisms are Driving Precision Medicine Therapies”



Featured Speaker

WOMEN'S HEALTH AND GYNECOLOGY

MICKEY M. KARRAM, MD

Director of the research division in women's health at The Christ Hospital and Professor of Obstetrics and Gynecology and Urology at the University of Cincinnati School of Medicine | Cincinnati, OH

“Energy Sources Used for Female Sexual Dysfunction/Enhancement; Do They Really Work?”

Honorary Awards



DR. HORACE FURUMOTO INNOVATIONS PROFESSIONAL DEVELOPMENT - YOUNG INVESTIGATOR AWARD

PRAVEEN ARANY, DDS, PHD

Talk Title: "Low Dose Clinical Biophotonics: Molecular Mechanisms are Driving Precision Medicine Therapies"

Date/Time: Friday, April 1 | 11:09 AM - 11:26 AM

Location: Hynes Auditorium – Plenary Session



CAROLINE AND WILLIAM MARK MEMORIAL AWARD

DAVID SLINEY, PHD

Talk Title: "A Half-Century of Lasers in Surgery and Medicine"

Date/Time: Saturday, April 2 | 5:07 PM - 5:27 PM

Location: Hynes 102 – Basic Science and Translational Research Abstract Session



LEON GOLDMAN MEMORIAL AWARD

CHRISTINE DIERICKX, MD

Talk Title: "Magic Bullets"

Date/Time: Friday, April 1 | 4:10 PM - 4:30 PM

Location: Hynes Auditorium – Cutaneous Applications Abstract Session



ELLET H. DRAKE MEMORIAL AWARD

MATHEW M. AVRAM MD, JD

Talk Title: "Pushing Innovation with Energy-Based Treatments in your Daily Practice"

Date/Time: Saturday, April 2 | 10:44 AM - 10:55 AM

Location: Hynes Auditorium – Cutting Edge: Laser and Skin Session



EXCELLENCE IN LASER NURSING/ALLIED HEALTH AWARD

MARY STOLL, RN

Talk Title: "That was Then, This is How!"

Date/Time: Thursday, March 31 | 1:51 PM - 2:11 PM

Location: Back Bay Ballroom C – Nursing/Allied Health Course

Presidential Citations



KENNETH A. ARNDT, MD

In grateful appreciation of your dedication to the Society, your excellence as a clinician, scientist, teacher and mentor and for being a pioneer and visionary with the highest ethical standards.



JEFFREY S. DOVER, MD, FRCPC

In grateful appreciation of your teaching and scientific excellence, and for your contributions as a visionary and innovator with continued dedication and leadership of the Society.



RICHARD BANKOWSKI

In grateful appreciation of your service and dedication to the Society and your invaluable contribution as an international ASLMS ambassador and worldwide leader in laser and energy device education.



HENRY H. L. CHAN, MD, PHD, FRCP

In grateful appreciation of your service and dedication to the Society and for your efforts on a global scale to be a leader and to promote the science of lasers and energy devices



MITCHEL P. GOLDMAN, MD

In grateful appreciation of your advancement of laser and energy device education with innovative research and publications including comprehensive textbooks and years of scientific excellence presenting at ASLMS.



RON R. ALLISON, MD

In grateful appreciation of your leadership, hard work, determination and innovation in strengthening the Society's educational programs as Program Chair for the 2016 Annual Conference.



JEREMY B. GREEN, MD

In grateful appreciation of your leadership, hard work, determination and innovation in strengthening the Society's educational programs as Program Chair for the 2016 Annual Conference.



ASHISH C. BHATIA, MD, FAAD

In grateful appreciation of your leadership, hard work, determination and innovation in strengthening the Society's educational programs as Program Chair for the 2016 Annual Conference.



DAVID J. GOLDBERG, MD, JD

In grateful appreciation of your service and dedication to the Society as Legal Advisor to the Board of Directors from 1998 to 2016.



DAVID H. MCDANIEL, MD

In grateful appreciation of your commitment to research and innovation to advance laser and energy based science, and your years of commitment to teaching at ASLMS.

Best of Session Awards

BEST OF PAPDT-PDT ABSTRACT SESSION AWARD

IMRAN RIZVI, PHD

Abstract Title: OVERCOMING ENDOTHELIAL CELL-MEDIATED HETEROGENEITY AND CHEMORESISTANCE IN 3D TUMOR MODELS USING PDT-BASED COMBINATIONS

Date/Time: Saturday, April 2 | 5:12 PM - 5:18 PM

Location: Hynes 104 – ASLMS/PAPDT – PDT Abstract Session

BEST OF CUTANEOUS APPLICATIONS ABSTRACT SESSION AWARD

PAUL M. FRIEDMAN, MD

Abstract Title: TRASER: PRELIMINARY RESULTS FROM A CLINICAL TRIAL FOR THE TREATMENT OF NASAL TELANGIECTASIAS

Date/Time: Sunday, April 3 | 10:01 AM - 10:07 AM

Location: Hynes Auditorium – Cutaneous Applications Abstract Session

OUTSTANDING EARLY CAREER ABSTRACT AWARD

CHRISTINA BANZHAF, MD

Abstract Title: INVESTIGATING THE TIME FRAME OF DRUG-APPLICATION FOR OPTIMAL UPTAKE IN AFXL-EXPOSED SKIN - A RANDOMIZED CONTROLLED CLINICAL TRIAL

Date/Time: Sunday, April 3 | 7:06 AM - 7:10 AM

Location: Hynes 103 – Early Career Abstract Session

OUTSTANDING EARLY CAREER ABSTRACT AWARD

EDWARD C. KUAN, MD, MBA AND WILLIAM YAO, BS

Abstract Title: LASER GENERATED SHOCKWAVES ENHANCE ANTIBACTERIAL ACTIVITY AGAINST BIOFILMS *IN VITRO*

Date/Time: Sunday, April 3 | 7:21 AM - 7:25 AM

Location: Hynes 103 – Early Career Abstract Session

OUTSTANDING EARLY CAREER ABSTRACT AWARD

SEONGUK MIN, MD

Abstract Title: COMPARISON OF Er:YAG LASER AND BIPOLAR RADIOFREQUENCY COMBINED WITH INFRARED DIODE LASER FOR THE TREATMENT OF ACNE SCARS: DIFFERENTIAL EXPRESSION OF TGF β ISOFORMS MAY BE ASSOCIATED WITH DIFFERENCES IN EFFICACY BETWEEN ABLATIVE AND NON-ABLATIVE LASER TREATMENT

Date/Time: Sunday, April 3 | 10:37 AM - 10:41 AM

Location: Hynes 103 – Early Career Abstract Session

KERITH FOUNDATION BEST OF PHOTOBIMODULATION ABSTRACT SESSION AWARD

STELLA R. ZAMUNER, PHD

Abstract Title: THE INVOLVEMENT OF ATP SYNTHETICS IN CELLULAT PROTECTION CAUSED BY PHOTOBIMODULATION IN C2C12 CELLS EXPOSED TO SNAKE VENOM

Date/Time: Friday, April 1 | 3:30 PM - 3:40 PM

Location: Hynes 103 – Photobiomodulation Session

Best Overall Abstract Awards

BEST OVERALL BASIC SCIENCE AND TRANSLATIONAL RESEARCH AWARD

CHRISTINA BANZHAF, MD

Abstract Title: INVESTIGATING THE TIME FRAME OF DRUG-APPLICATION FOR OPTIMAL UPTAKE IN AFXL-EXPOSED SKIN - A RANDOMIZED CONTROLLED CLINICAL TRIAL

Date/Time: Sunday, April 3 | 7:06 AM - 7:10 AM

Location: Hynes 103 – Early Career Abstract Session

DR. RICHARD E. FITZPATRICK CLINICAL RESEARCH AND INNOVATIONS AWARD

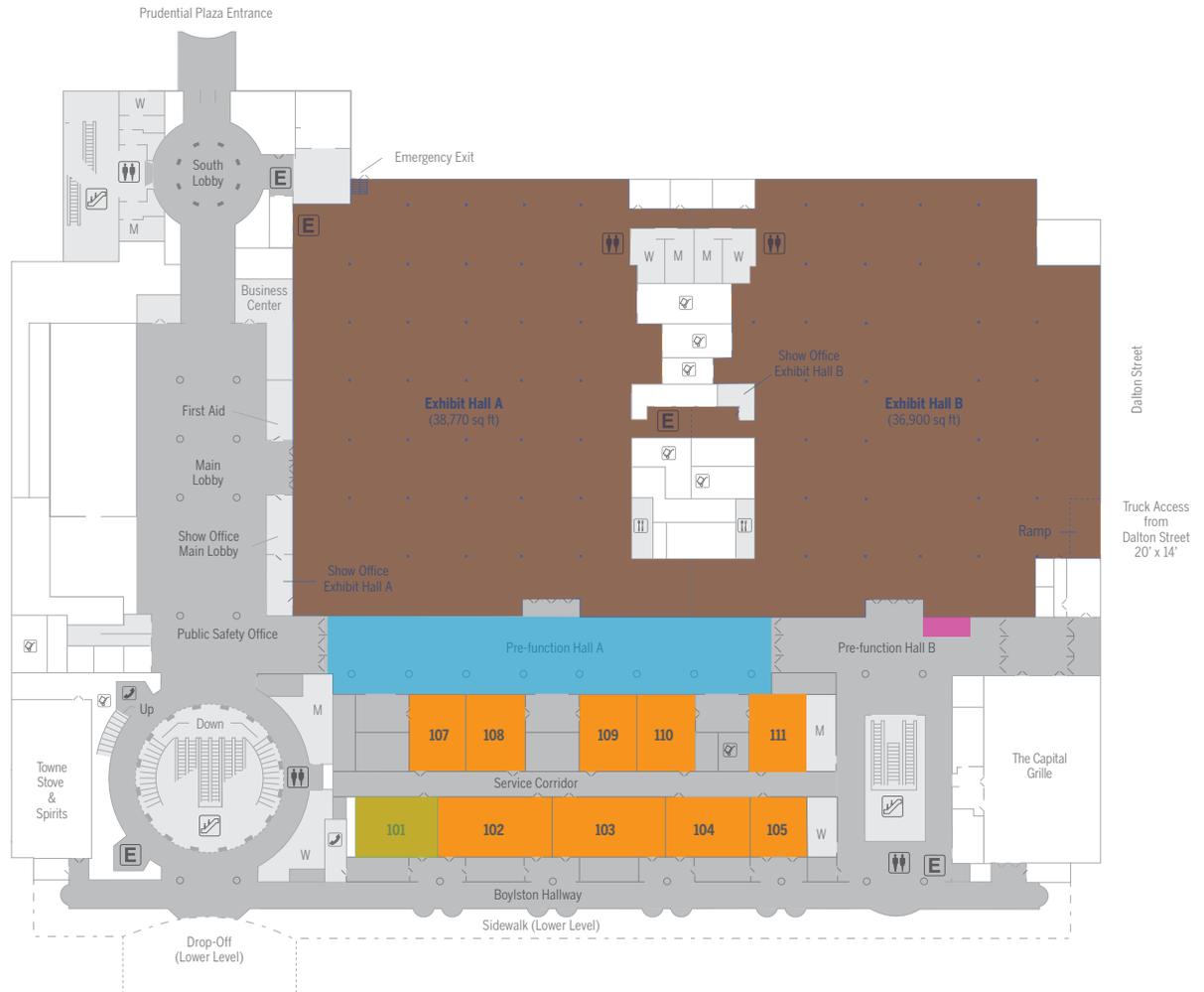
EMILY WENANDE, MD

Abstract Title: A RANDOMIZED SIDE-BY-SIDE STUDY COMPARING ALEXANDRITE LASER AT DIFFERENT PULSE DURATIONS FOR PORT WINE STAINS

Date/Time: Sunday, April 3 | 10:08 AM - 10:14 AM

Location: Hynes Auditorium – Cutaneous Applications Abstract Session

Hynes: Plaza Level



● **HALL A - PRE-FUNCTION**

- » Conference Registration: Wednesday, March 30 | 7:00 AM - 5:30 PM; Thursday, March 31 | 7:00 AM - 5:30 PM; Friday, April 1 | 6:00 AM - 8:30 PM; Saturday, April 2 | 6:00 AM - 7:00 PM; Sunday, April 3 | 6:30 AM - 12:00 PM
- » Exhibitor Registration: Wednesday, March 30 | 1:00 PM - 5:00 PM; Thursday, March 31 | 8:00 AM - 5:00 PM; Friday, April 1 | 8:00 AM - 4:00 PM; Saturday, April 2 | 8:00 AM - 7:00 PM

● **HALL B - PRE-FUNCTION**

- » Early Career Exhibit Hall Tour Meet-up Location: Friday, April 1 | 10:00 AM - 10:30 AM & 2:15 PM - 2:45 PM

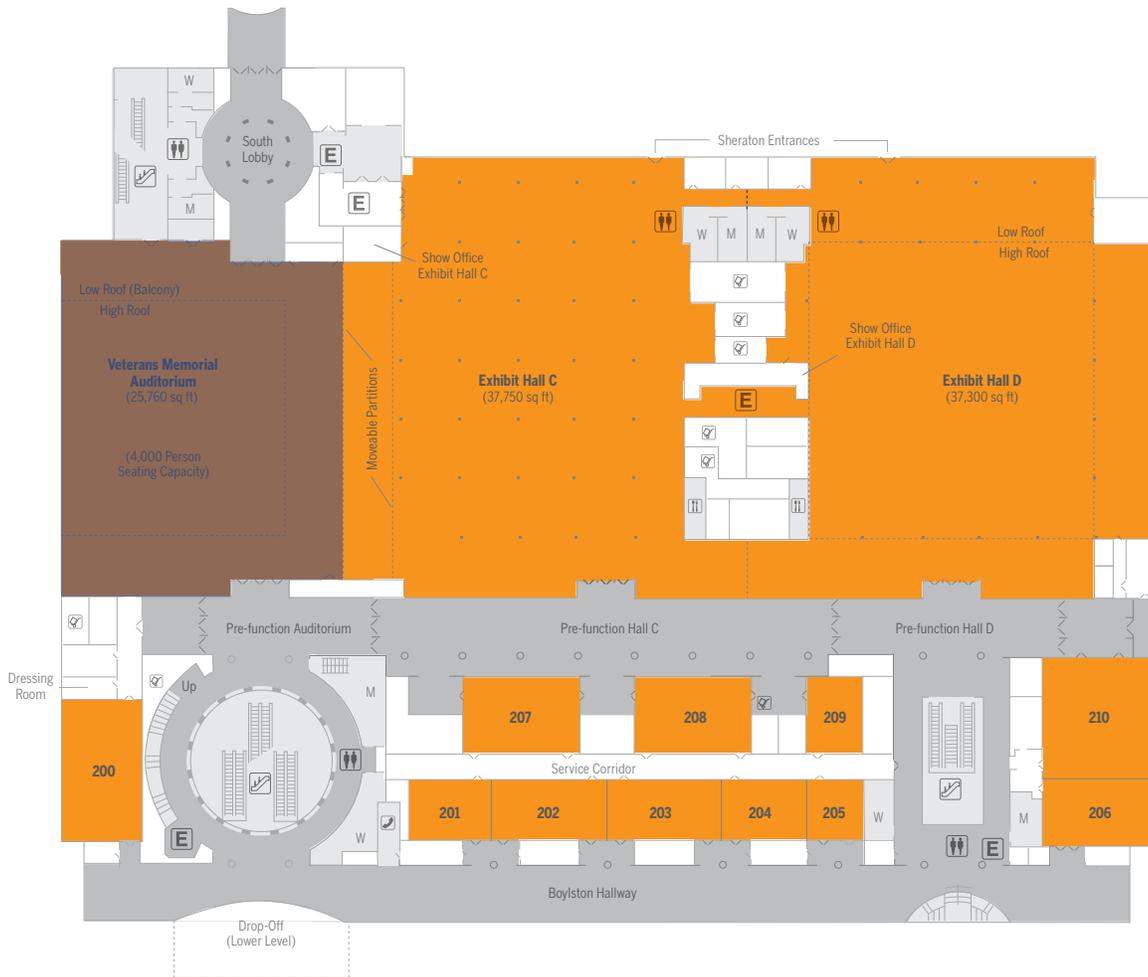
● **ROOM 101**

- » Speaker Ready Room: Wednesday, March 30 | 7:00 AM - 5:30 PM; Thursday, March 31 | 7:00 AM - 5:30 PM; Friday, April 1 | 6:00 AM - 8:00 PM; Saturday, April 2 | 6:00 AM - 5:30 PM; Sunday, April 3 | 6:00 AM - 12:00 PM

● **HALLS A & B**

- » Exhibits & ePosters: Friday, April 1 | 9:00 AM - 4:00 PM; Saturday, April 2 | 9:00 AM - 7:00 PM
- » Ask Me Anything (*Hall A*): Saturday, April 2 | 2:45 PM - 3:30 PM
- » Exhibitor Reception: Saturday, April 2 | 5:30 PM - 7:00 PM
- » Silent Auction: Bidding: Friday, April 1 | 9:00 AM - 4:00 PM; Saturday, April 2 | 9:00 AM - 6:30 PM — Winners announced shortly after bidding closes

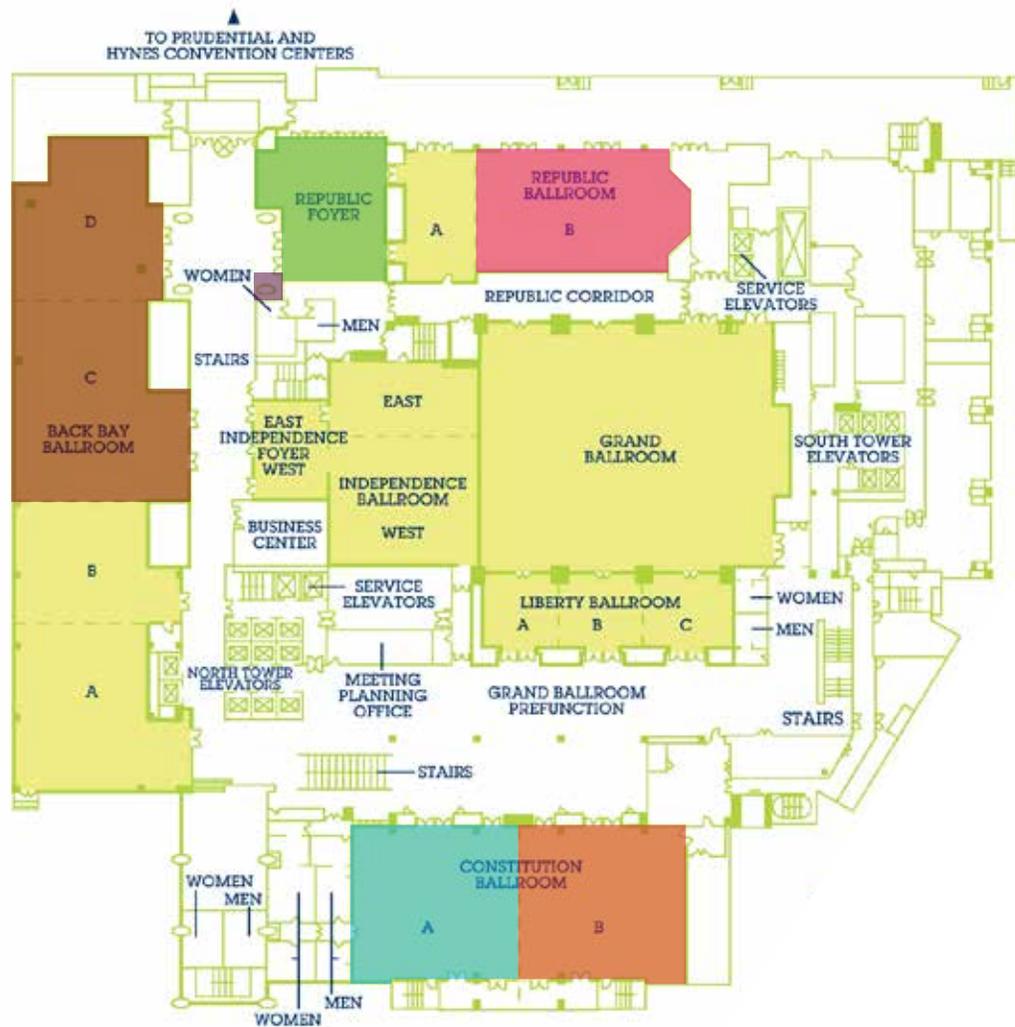
Hynes: Level 2



● AUDITORIUM

- » Plenary Session: Friday, April 1 | 10:30 AM - 12:00 PM
- » ASLMS Business Meeting (*members only*): Friday, April 1 | 12:00 PM - 12:30 PM
- » Tech Connect: Friday, April 1 | 4:45 PM - 7:15 PM
- » Emerging Energy-Based Device Applications in Gynecology: Saturday, April 2 | 9:30 AM - 10:15 AM
- » Cutting Edge: Laser and Skin Session: Saturday, April 2 | 10:30 AM - 12:00 PM
- » Luminary Rapid Fire Laser and Energy Pearls: Sunday, April 3 | 11:00 AM - 12:00 PM

Sheraton: Second Floor



● **OUTSIDE OF REPUBLIC FOYER**

» Information Desk (*see Registration Desk if closed*): Thursday, March 31 | 6:30 AM - 4:00 PM;
Friday, April 1 | 6:30 AM - 4:00 PM; Saturday, April 2 | 6:30 AM - 4:00 PM

● **REPUBLIC BALLROOM**

» Celebration of ASLMS Women in Energy-Based Devices: Friday, April 1 | 7:30 PM - 9:30 PM

● **CONSTITUTION BALLROOM B**

» Early Career Reception: Saturday, April 2 | 7:30 PM - 9:00 PM

● **REPUBLIC FOYER**

» Continental Breakfast: Wednesday, March 30 | 7:00 AM - 8:00 AM

● **CONSTITUTION BALLROOM A**

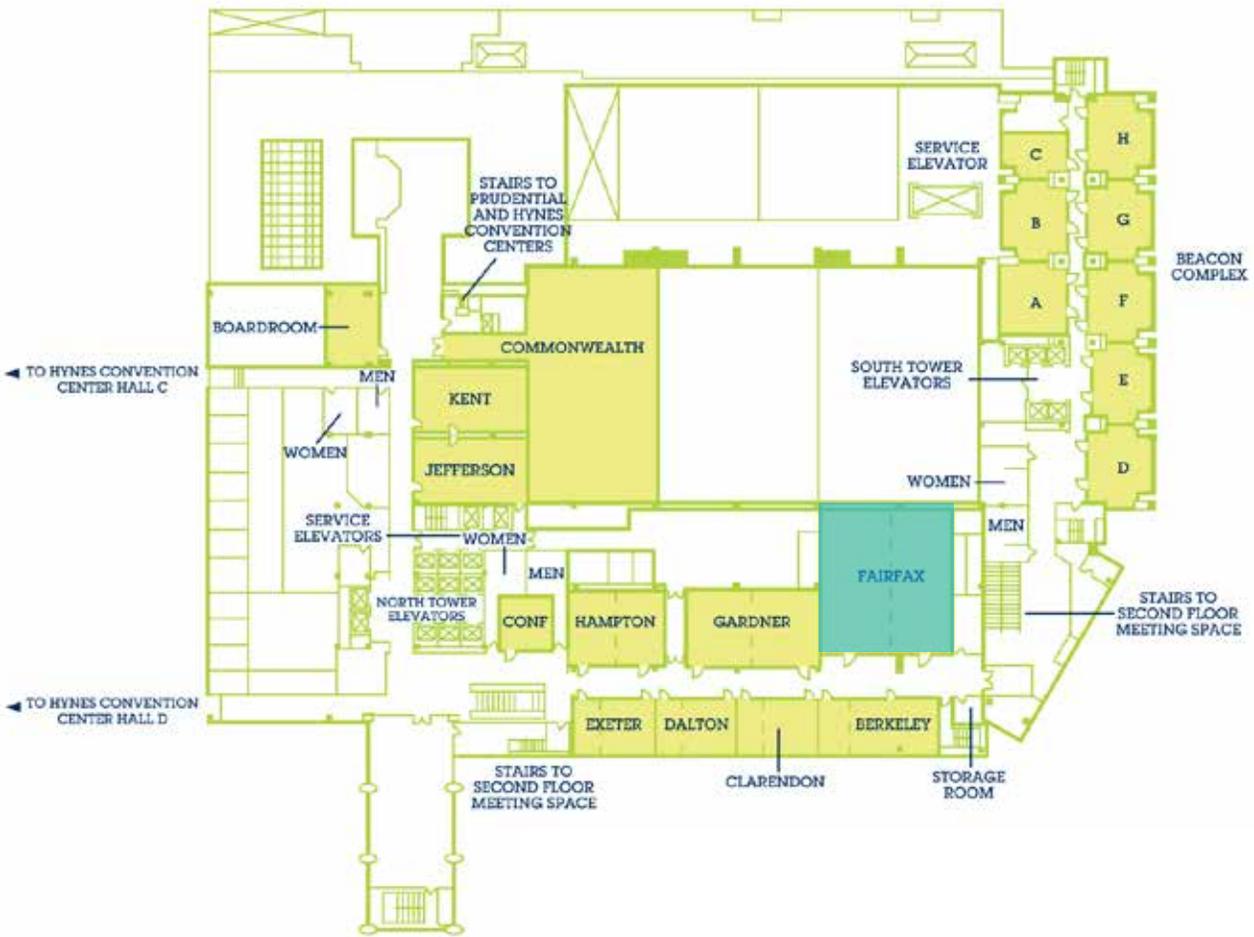
» Continental Breakfast: Friday, April 1 | 6:30 AM - 8:30 AM; Saturday, April 2 | 6:30 AM - 8:30 AM;
Sunday, April 3 | 6:30 AM - 8:00 AM

● **BACK BAY BALLROOM C & D**

» Clinical and Career Pearls for Residents/Fellows and Energy-Based Device Novices:
Saturday, April 2 | 1:30 PM - 5:30 PM

Note: Continental Breakfast on Thursday will be available in each course room.

Sheraton: Third Floor



● FAIRFAX

» ANSI SSC3 Meeting: Friday, April 1 | 7:00 AM - 8:00 AM

Attendee Information

OFFICIAL LANGUAGE

The official language at the ASLMS Annual Conference is English. No simultaneous translation is available.

COPYRIGHT

All of the proceedings of the conference, including the presentation of scientific papers, are intended solely for the benefit of the members of the ASLMS. No statement of presentation made is to be regarded as dedicated to the public domain. Any statement or presentation is to be regarded as limited publication only and all property rights in the material presented, including common law copyright, are expressly reserved to the speaker and to the ASLMS. Any sound reproduction, transcript or other use of the material presented at the Annual Conference without the permission of the speaker and the ASLMS is prohibited to the full extent of common law copyright in such material.

DISCLAIMER

The views expressed and materials presented throughout the Annual Conference whether during scientific sessions, instructional courses or otherwise, represent the personal views of the individual participants and do not represent the opinion of the ASLMS. This organization assumes no responsibility for the content of the presentations made by an individual participant or group of participants.

DISCLOSURE OF FACULTY AND SPEAKER COMMERCIAL RELATIONSHIP(S)

Consistent with the ASLMS policy, faculty and speakers for the conference are expected to disclose at the beginning of their presentation, any economic or other personal interests that create, or it may be perceived as creating, a conflict related to the material discussed. This policy is intended to make you aware of faculty's and speaker's interests, so you may form your own judgments about such material. Disclosure of faculty's and speaker's relationship(s) is indicated in the conference program. Please be advised that FDA approval is specific in regard to approved uses and labeling of drugs and devices. The presenter must disclose whether or not the device/treatment is approved by the FDA or if it is considered to be investigational, and must fully disclose any off-label use of devices, drugs or other materials that constitute the subject of the presentation. In order to meet the guidelines established by the Accreditation Council for Continuing Medical Education, the ASLMS Committee on Continuing Education has endorsed the policy that disclosure of all proprietary interests or other potential conflicts of interest must be provided to conference registrants of all speakers and spouses who have relationships with industry.

INTERNET

Free wireless internet service will be available throughout the ASLMS conference rooms and exhibit halls. This service is designed for casual users and not guaranteed. If you are relying on the internet to showcase your product or services, we strongly recommend a wired internet connection for guaranteed service.

LITERATURE/PHOTOGRAPHY/VIDEOTAPING POLICY

NO literature can be distributed during scientific sessions. NO photography or videotaping is permitted in scientific sessions or the exhibit hall.

The ASLMS reserves the right to take photos at the Annual Conference and to publish the photos in ASLMS marketing materials. Your attendance and registration authorizes the ASLMS to publish photos in our publications, marketing materials and on our website. If your photo appears on the website or in a publication, and you prefer that we discontinue using the image, please contact our office to identify the photo.

RESEARCH EDUCATION FUND RIBBONS AND PINS

We sincerely appreciate member contributions to the ASLMS Research fund. We acknowledge contributing members with ribbons and pins during the conference.

COMPLIMENTARY CONTINENTAL BREAKFAST/BREAKS

Complimentary continental breakfasts and breaks will be provided to course attendees and conference attendees, Wednesday through Sunday.

DISASTER POLICY

In the event of an emergency situation during the Annual Conference, information will be posted on the Society's website, www.aslms.org or via notification through the ASLMS mobile app.

SMOKING

It is a policy of the ASLMS that the use of tobacco products is strictly prohibited at the conference and in all areas of the exhibit hall (including setup and dismantle of exhibits). Thank you for not smoking.

RESPONSIBLE DRINKING POLICY

With alcohol served during the conference reception, the ASLMS encourages responsible drinking. In addition to alcoholic beverages, non-alcoholic options are provided. Alcohol is not served to anyone under age 21. Attendees may be asked to present their ID.

CHILDCARE SERVICES

Children under the age of 18 are not permitted in the Exhibit Hall or scientific sessions. For liability reasons, the ASLMS and the Sheraton Boston Hotel are not able to make childcare service recommendations. Attending parents are responsible for arranging their own childcare if needed.

PRESS

Press materials are available to media on a jump drive at the registration desk. Please ask for the drive when you register. Please contact Andrea Alstad, Marketing and Communications Manager, via email at andrea@aslms.org or by phone 715-845-9283, with media inquiries. Andrea will be available throughout the conference to offer additional information or to arrange interviews. Members of the press are invited to all courses and sessions (excludes breakfasts and luncheons); however, they must adhere to the guidelines below:

- » Members of the press must register and wear badges identifying them as media representatives.
- » Media representatives are required to schedule interviews with speakers through the Society's Marketing and Communications Manager, Andrea Alstad at andrea@aslms.org or 715-845-9283.
- » Members of the press are not permitted to ask questions at the microphones or via the mobile app during a scientific session.

ASLMS MOBILE APP

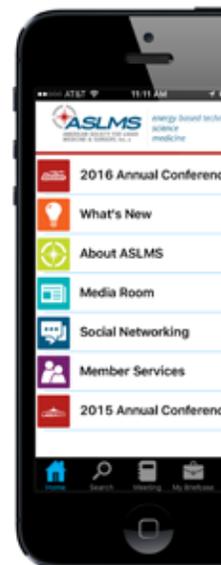
The ASLMS mobile app has many features that will make electronically accessing and scheduling your conference content incredibly easy.

HOTEL INFORMATION

Sheraton Boston Hotel
39 Dalton Street
Main Hotel Number: 617-236-2000
Guest Fax Number: 617-236-1702
Check-in: 3:00 PM, Check-out: Prior to 12:00 PM

SPEAKER READY ROOM

Hynes 101
Hours of Operation for 2016 ASLMS Annual Conference
Wednesday, March 30 | 7:00 AM - 5:30 PM
Thursday, March 31 | 7:00 AM - 5:30 PM
Friday, April 1 | 6:00 AM - 8:00 PM
Saturday, April 2 | 6:00 AM - 5:30 PM
Sunday, April 3 | 6:00 AM - 12:00 PM



Thank you to the following outstanding group of Section Chairs who voluntarily labored tirelessly this year to select the best abstracts for presentation at the Annual Conference. During this conference, they will continue to work hard to ensure that their sessions run on time and that the speakers provide appropriate disclosures of interest to maintain our current CME accreditation by the Accreditation Council for Continuing Medical Education.

Program Chairs, Section Chairs & Session Moderators



ROBERT A. WEISS, MD
 ASLMS President
 MD Laser Skin & Vein Institute
 Hunt Valley, MD



JEREMY B. GREEN, MD
 2016 Program Co-Chair
 Dermatology & Skin Cancer
 Institute
 Coral Gables, FL



ASHISH C. BHATIA, MD, FAAD
 2016 Program Co-Chair
 The Dermatology Institute
 Naperville, IL



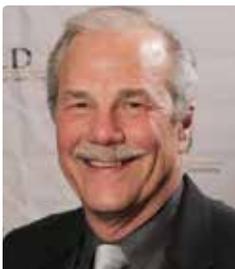
RON R. ALLISON, MD
 2016 Program Co-Chair
 PAPDT Co-Section Chair
 21st Century Oncology
 Greenville, NC



RAYMOND J. LANZAFAME, MD, MBA, FACS
 CME Director
 Raymond J. Lanzafame, MD, PLLC
 Rochester, NY



PRAVEEN ARANY, DDS, PHD
 ALD – Laser Dental
 Applications Co-Section Chair
 Photobiomodulation Co-
 Section Chair
 National Institute of Health
 Bethesda, MD



MEL BURCHMAN, DDS
 ALD – Laser Dental
 Applications Co-Section Chair
 Mel Burchman, DDS
 Langhorne, PA



THOMAS S. MANG, PHD
 Basic Science and
 Translational Research Co-
 Section Chair
 SUNY at Buffalo School of Dental
 Buffalo, NY



SERGE R. MORDON, PHD
 Basic Science and
 Translational Research Co-
 Section Chair
 Director, French National Institute
 of Health and Medical Research
 (INSERM)
 Lille, France



ILKO ILEV, PHD
 Biological Imaging Section
 Chair
 US FDA – Center for Devices and
 Radiological Health
 Silver Spring, MD



EMIL A. TANGHETTI, MD
 Cutaneous Applications Co-
 Section Chair, ePoster Section
 Chair
 Center for Dermatology & Laser
 Surgery
 Sacramento, CA



THOMAS E. ROHRER, MD
 Cutaneous Applications Co-
 Section Chair
 Skin Care Physicians of Chestnut
 Chestnut Hill, MA



NAZANIN A. SAEDI, MD
 Cutaneous Applications Co-
 Section Chair
 Thomas Jefferson University
 Philadelphia, PA



BRIAN S. BIESMAN, MD
 Cutaneous Applications Co-
 Moderator
 Nashville Centre for Laser
 Nashville, TN



TERRENCE C. KEANEY, MD
 Cutaneous Applications Co-
 Moderator
 Washington Institute of
 Dermatologic Laser Surgery
 Washington, DC



**GIRISH S. MUNAVALLI, MD,
 MHS**
 Cutaneous Applications Co-
 Moderator
 Dermatology, Laser & Vein
 Specialists
 Charlotte, NC



ANDREI METELITSA, MD
 Cutaneous Applications Co-
 Moderator
 Institute for Skin Advancement
 Calgary, Canada



VINEET MISHRA, MD
 Early Career Co-Section Chair
 UT Medicine, Cancer Therapy &
 Research Center
 San Antonio, TX



**ANTHONY M. ROSSI, MD,
 FAAD**
 Early Career Co-Section Chair
 Memorial Sloan Kettering Cancer
 Center
 New York, NY



BRADLEY S. BLOOM, MD
 Early Career Co-Moderator
 Skin Laser & Surgery Specialists
 New York, NY



ELIZABETH GEDDES, MD
 Early Career Co-Moderator
 Dermatology & Laser Surgery
 Center
 Houston TX



RICHARD O. GREGORY, MD
 Exhibit Chair
 Celebration Health Institute of
 Aesthetic Surgery
 Celebration, FL



CHRISTIAN S. BETZ, MD, PHD
 HNODIS Optical Diagnostics I
 Section Chair
 Dept. of Otorhinolaryngology, LM
 Munich, Germany



**BRIAN J.F. WONG, MD, PHD,
 FACS**
 HNODIS Optical Diagnostics II
 Section Chair
 Beckman Laser Institute
 Irvine, CA



COLIN HOPPER, BDS, MBBS
 HNODIS – Photodynamic
 Therapy Section Chair
 Head and Neck Centre, University
 London, UK



RICHARD GODINE, DVM
 NAALT – Veterinary
 Applications
 Ruckersville Animal Hospital
 Ruckersville, VA



**DOUGLAS JOHNSON, LAT,
 ATC, EES, CLS**
 NAALT – Physical Medicine
 and Rehabilitation
 Senior Vice President, Clinical and
 Scientific Affairs at Multi Radianc
 Medical
 Solon, OH



MERRILL A. BIEL, MD, PHD
 PAPDT – PDT Co-Section Chair
 Minneapolis Ear, Nose & Throat
 Minneapolis, MN



KEITH CENGEL, MD, PHD
 PAPDT – PDT Co-Section Chair
 University of Pennsylvania, School
 of Medicine
 Philadelphia, PA



TAYYABA HASSAN, PHD
 PAPDT – PDT Co-Section Chair
 Wellman Center for Photomedicine
 Boston, MA



JUANITA J. ANDERS, PHD
 Photobiomodulation Co-
 Section Chair
 Uniformed Services University of
 the Health Sciences
 Bethesda, MD



VANESSA HOLANDA, MD
 Photobiomodulation
 Moderator
 Tadeu Cvintal Hospital
 Sao Paulo, Brazil

Central Office Staff



DIANNE DALSKY
Executive Director
dianne@aslms.org



JOANN JANIKOWSKI
Associate Executive Director
joann@aslms.org



PAULA DEFFNER
Accounting Specialist
paula@aslms.org



DIANE DODDS
Member and Customer Service
Specialist
ddodds@aslms.org



BETH BARTELT
Education Program Manager
beth@aslms.org



CORRI MARSCHALL
Conference Specialist
corri@aslms.org



DESIREE VAN BERKEL
Education and Event Assistant
desiree@aslms.org



ANDREA ALSTAD
Marketing and
Communications Manager
andrea@aslms.org



STEPHANIE GRAUDEN
Communications Specialist
stephanie@aslms.org

WEDNESDAY, MARCH 30, 2016			
ACTIVITY	START	END	ROOM*
Exhibits	CLOSED		
Registration	7:00 AM	5:30 PM	Hynes Hall A - Pre-function
Continental Breakfast	7:00 AM	8:00 AM	Republic Foyer
\$ COURSE:			
• #001 Fundamentals of Lasers in Health Care (full day)	8:00 AM	5:30 PM	Republic Ballroom
Lunch Break (on your own)	12:00 PM	1:00 PM	

THURSDAY, MARCH 31, 2016			
ACTIVITY	START	END	ROOM*
Exhibits	CLOSED		
Registration	7:00 AM	5:30 PM	Hynes Hall A - Pre-function
Continental Breakfast (breakfast in each course room)	7:00 AM	8:00 AM	
\$ COURSES: (choose one from the following)			
• #002 Expert Treatment Approaches	8:00 AM	12:00 PM	Republic Ballroom
• #003 Pediatric Laser Focus	8:00 AM	12:00 PM	Back Bay Ballroom A & B
• #004 Nursing/Allied Health (full day)	8:00 AM	5:30 PM	Back Bay Ballroom C
Lunch Break (on your own)	12:00 PM	1:30 PM	
\$ MASTERS LUNCHEONS: (choose one from the following)			
• #007 Fractional Resurfacing	12:15 PM	1:15 PM	Constitution Ballroom B
• #008 Neck Rejuvenation	12:15 PM	1:15 PM	Fairfax
• #009 Our Favorite Laser Pearls	12:15 PM	1:15 PM	Independence West
• #010 PDT: State-of-the-Art	12:15 PM	1:15 PM	Gardner
• #011 State-of-the-Art in Tattoo Treatment	12:15 PM	1:15 PM	Independence East
• #012 What's New in Lasers/Energy-Based Devices	12:15 PM	1:15 PM	Commonwealth
\$ COURSES: (choose one from the following)			
• #005 Combining Injectables with Lasers, Lights and Energy-Based Devices	1:30 PM	5:30 PM	Republic Ballroom
• #006 Device-Based Resurfacing, Rejuvenation and Recontouring	1:30 PM	5:30 PM	Back Bay Ballroom A & B

FRIDAY, APRIL 1, 2016			
ACTIVITY	START	END	ROOM*
Exhibits	9:00 AM	4:00 PM	Hynes Halls A & B
Registration	6:00 AM	8:30 PM	Hynes Hall A - Pre-function
Continental Breakfast	6:30 AM	8:30 AM	Constitution Ballroom A
\$ MASTERS BREAKFASTS: (choose one from the following)			
• #013 Cellulite	6:45 AM	8:00 AM	Hynes 104
• #014 Optimizing Patient Experience	6:45 AM	8:00 AM	Hynes 103
• #015 Scar Wars	6:45 AM	8:00 AM	Hynes 102
ANSI SSC3 Meeting (all conference attendees invited)	7:00 AM	8:00 AM	Fairfax
WORKSHOPS: (choose one from the following)			
• #017 Safety Compliance in the Practice Environment	8:00 AM	10:00 AM	Back Bay Ballroom A & B
• #018 ASLMS/ALD - Laser Dental Applications	8:00 AM	10:00 AM	Republic Ballroom
• #019 Complications, Legal Issues, and Laser Safety	8:00 AM	10:00 AM	Back Bay Ballroom C & D
• #020 Gynecologic and Cutaneous Therapeutic Challenges and New Treatments	8:00 AM	10:00 AM	Hynes Auditorium
Break View ePosters Visit Exhibits	10:00 AM	10:30 AM	Hynes Halls A & B
Early Career Exhibit Hall Tours (free - must register)	10:00 AM	10:30 AM	Hynes Halls A & B
PLENARY SESSION:			
• Welcome and Introduction • Presidential Address & Citations • Awards • Special Speaker - Women's Health • Keynote Speaker	10:30 AM	12:00 PM	Hynes Auditorium
ASLMS Business Meeting (members only)	12:00 PM	12:30 PM	Hynes Auditorium
Lunch Break (on your own) View ePosters Visit Exhibits	12:00 PM	1:00 PM	Hynes Halls A & B
ABSTRACT SESSIONS:			
• ASLMS/ALD - Laser Dental	1:00 PM	2:15 PM	Hynes 107
• ASLMS/PAPDT - PDT	1:00 PM	2:15 PM	Hynes 104
• Basic Science & Translational Research	1:00 PM	2:15 PM	Hynes 102
• Cutaneous Applications	1:00 PM	2:15 PM	Hynes Auditorium
• Photobiomodulation	1:00 PM	2:15 PM	Hynes 103
Break View ePosters Visit Exhibits	2:15 PM	3:00 PM	Hynes Halls A & B
Early Career Exhibit Hall Tours (free - must register)	2:15 PM	2:45 PM	Hynes Halls A & B

Schedule and rooms subject to change | \$ Fee Required to Attend | * Meeting rooms located at the Sheraton unless otherwise noted

ABSTRACT SESSIONS:			
• ASLMS/ALD - Laser Dental	3:00 PM	4:30 PM	Hynes 107
• ASLMS/PAPDT - PDT	3:00 PM	4:30 PM	Hynes 104
• Basic Science & Translational Research	3:00 PM	4:30 PM	Hynes 102
• Cutaneous Applications	3:00 PM	4:30 PM	Hynes Auditorium
• Photobiomodulation	3:00 PM	4:00 PM	Hynes 103
SPECIAL SESSION: Tech Connect (<i>non-CME; included with conference registration</i>)	4:45 PM	7:15 PM	Hynes Auditorium
FEATURE EVENT: Celebration of ASLMS Women in Energy-Based Devices	7:30 PM	9:30 PM	Republic Ballroom

SATURDAY, APRIL 2, 2016

ACTIVITY	START	END	ROOM*
Exhibits	9:00 AM	7:00 PM	Hynes Halls A & B
Registration	6:00 AM	7:00 PM	Hynes Hall A - Pre-function
Continental Breakfast	6:30 AM	8:30 AM	Constitution Ballroom A
WORKSHOPS: (<i>choose one from the following</i>)			
• #021 Basic Mechanisms of Photobiomodulation	7:00 AM	9:00 AM	Constitution Ballroom B
• #022 Laser Assisted Drug Delivery	7:00 AM	9:00 AM	Back Bay Ballroom C & D
• #023 Non-Invasive Body Contouring Options	7:00 AM	9:00 AM	Hynes Auditorium
• #024 Periorbital Therapies and Rejuvenation	7:00 AM	9:00 AM	Back Bay Ballroom A & B
ABSTRACT SESSION:			
• ASLMS/HNODIS – Optical Diagnostics I.	8:00 AM	12:00 PM	Hynes 108
Break View ePosters Visit Exhibits	9:00 AM	9:30 AM	Hynes Halls A & B
SPECIAL SESSION: Emerging Energy-Based Device Applications in Gynecology	9:30 AM	10:15 AM	Hynes Auditorium
ABSTRACT SESSION:			
• ASLMS/NAALT - Veterinary Applications	10:00 AM	12:00 PM	Hynes 107
SPECIAL SESSION: Cutting Edge: Laser and Skin Session	10:30 AM	12:00 PM	Hynes Auditorium
Lunch Break (<i>on your own</i>) View ePosters Visit Exhibits	12:00 PM	1:30 PM	Hynes Halls A & B
SPECIAL SESSION: Clinical and Career Pearls for Residents/Fellows and Energy-Based Device Novices	1:30 PM	5:30 PM	Back Bay Ballroom C & D
ABSTRACT SESSIONS:			
• ASLMS/PAPDT – PDT (*PAPDT Business Meeting in same room at 1:00 – All Welcome)	1:30 PM	2:45 PM	Hynes 104
• Basic Science and Translational Research	1:30 PM	2:45 PM	Hynes 102
• Cutaneous Applications	1:30 PM	2:45 PM	Hynes Auditorium
• ASLMS/HNODIS – Optical Diagnostics II.	1:30 PM	2:45 PM	Hynes 108
• ASLMS/NAALT - Physical Medicine and Rehabilitation	1:30 PM	2:45 PM	Hynes 107
• Photobiomodulation	1:30 PM	2:45 PM	Hynes 103
Break View ePosters Visit Exhibits	2:45 PM	3:30 PM	Hynes Halls A & B
FEATURE EVENT: Ask me Anything (<i>non-CME Q&A</i>)	2:45 PM	3:30 PM	Hynes Hall A
ABSTRACT SESSIONS:			
• ASLMS/PAPDT - PDT	3:30 PM	5:30 PM	Hynes 104
• Basic Science and Translational Research	3:30 PM	5:30 PM	Hynes 102
• Cutaneous Applications	3:30 PM	5:30 PM	Hynes Auditorium
• Women's Health	3:30 PM	5:30 PM	Hynes 107
• ASLMS/HNODIS – Photodynamic Therapy	3:30 PM	5:30 PM	Hynes 108
• Photobiomodulation	3:30 PM	5:15 PM	Hynes 103
FEATURE EVENTS:			
Exhibitor Reception Silent Auction	5:30 PM	7:00 PM	Hynes Halls A & B
Early Career Reception	7:30 PM	9:00 PM	Constitution Ballroom B

SUNDAY, APRIL 3, 2016

ACTIVITY	START	END	ROOM*
Exhibits	CLOSED		
Registration	6:30 AM	12:00 PM	Hynes Hall A - Pre-function
Continental Breakfast	6:30 AM	8:00 AM	Constitution Ballroom A
ABSTRACT SESSIONS:			
• Early Career Abstracts (*Please note earlier start time)	7:00 AM	11:00 AM	Hynes 103
• Cutaneous Applications (*Please note earlier start time)	7:00 AM	11:00 AM	Hynes Auditorium
• Basic Science and Translational Research	7:30 AM	11:00 AM	Hynes 102
• Biological Imaging	7:30 AM	11:00 AM	Hynes 104
SPECIAL SESSION: Luminary Rapid Fire Laser and Energy Pearls	11:00 AM	12:00 PM	Hynes Auditorium

Schedule and rooms subject to change | \$ Fee Required to Attend | * Meeting rooms located at the Sheraton unless otherwise noted

8:00 AM - 5:30 PM | ROOM: REPUBLIC BALLROOM

AMA PRA CATEGORY 1.00 CME CREDITS: 8.25 MAX | CE CONTACT HOURS: 9.50 MAX
 ACCME accreditation statement regarding CMEs and CEUs available online

Fundamentals of Lasers in Health Care - Course

Educational Needs This course will provide participants with a basic understanding of lasers and other light energy-based technology and their use in clinical aesthetic applications

Participants Any physician or clinician who currently is using or investigating using lasers in their practice.

Background Requirements Minimal background and experience in the field of laser and other light-based technology and their application in health care.

Instructional Content/Expected Learning Outcomes Upon completion of this course, participants will:

- 1) Understand the biophysics pertinent to the application of lasers and other light-based energy devices and related technology, and will be prepared to apply this same understanding related to the provision of patient care.
- 2) Understand the working parts of a laser and other light-based devices.
- 3) Understand the interaction and implications of using lasers and other light-based devices and related technologies on human tissues and be capable of using this knowledge in the provision of patient care.
- 4) Be familiar with a broad array of lasers and light-based devices used in the provision of health care procedures and be capable of determining which laser and/or light-based technology is most appropriately used for particular clinical procedures.
- 5) Gain an introduction to the interactions of lasers and other light emitting devices and popular non device skin interventions (i.e., muscle relaxers and fillers, etc.).
- 6) Understand the safety risks to providers and patients associated with the use of lasers and related technology, and understand and be capable of using this knowledge to practice the safety necessary to provide a safe environment for all providers and patients.
- 7) Have sufficient exposure to a cross-section of clinical applications such that they are capable of using this knowledge to discern the clinical applications for which they may or may not choose to develop specific laser application skills.

Director J. Stuart Nelson, MD, PhD

Faculty Gregory T. Absten, BSc, MBA, CLRT; Patricia A. Owens, RN, MHA, CMLSO, CNOR; Gerald N. Goldberg, MD; Arisa E. Ortiz, MD; Robert A. Weiss, MD

TIME	ACTIVITY
8:00 AM - 8:04 AM	Introduction and Pre-Test – <i>J. Stuart Nelson</i>
8:05 AM - 9:04 AM	Biophysics Principles of Lasers and Related Technologies – <i>J. Stuart Nelson</i>
9:05 AM - 10:04 AM	Light Based Energy and its Interaction with Human Tissue – <i>J. Stuart Nelson</i>
10:05 AM - 10:19 AM	Break
10:20 AM - 10:50 AM	Lasers and Other Light Energy Devices – <i>Gregory T. Absten</i>
10:51 AM - 11:20 AM	Laser Safety – <i>Gregory T. Absten</i>
11:21 AM - 11:50 PM	National and International Influence on Your Practice – <i>Patricia A. Owens</i>
11:51 AM - 12:39 PM	Lunch
12:40 PM - 1:19 PM	Tattoos, Pigmented Lesions, Melasma and Treatment of Patients with Darker Skin Types – <i>Gerald N. Goldberg</i>
1:20 PM - 1:59 PM	Laser-Assisted Hair Removal – <i>Arisa E. Ortiz</i>
2:00 PM - 2:59 PM	Non-ablative and Ablative Fractional Skin Rejuvenation and Treatment of Scars – <i>Robert A. Weiss</i>
3:00 PM - 3:14 PM	Break
3:15 PM - 3:44 PM	Laser Treatment of Vascular Skin Lesions – <i>J. Stuart Nelson</i>
3:45 PM - 4:14 PM	Addressing Complications of Laser Procedures – <i>Gerald N. Goldberg</i>

TIME	ACTIVITY
4:15 PM - 4:44 PM	Light-Based Devices Combined with Other Modalities to Treat the Face – <i>Robert A. Weiss</i>
4:45 PM - 4:59 PM	Body Contouring – <i>Arisa E. Ortiz</i>
5:00 PM - 5:24 PM	Video Demonstration of Treatment Endpoints – <i>Gerald N. Goldberg</i>
5:25 PM - 5:30 PM	Conclusion, Q&A, Post-Test – <i>J. Stuart Nelson</i>

8:00 AM - 12:00 PM | ROOM: REPUBLIC BALLROOM

AMA PRA CATEGORY 1.00 CME CREDITS: 3.75 MAX | CE CONTACT HOURS: 4.50 MAX
 ACCME accreditation statement regarding CMEs and CEUs available online

Expert Treatment Approaches - Course

Educational Needs Laser and energy-based surgery is a rapidly changing field with many new devices coming out every year. Aside from this, there is a very specific art in how and when to use these devices. While most training programs offer hands-on experience with a variety of devices, the objective of this activity is to have leading experts give their results in using specific techniques and protocols treating the most difficult conditions.

Participants This activity is designed for physicians, nurses, nurse practitioners and others who have experience in treating patients with laser and energy-based devices.

Background Requirements Attendees should have a strong working knowledge of lasers and energy-based devices.

Instructional Content/Expected Learning Outcomes It is expected that participants in this activity will identify gaps in their knowledge, competence or performance in treating specific conditions such as scars, melasma, hyperhidrosis, cellulite and pigmented lesions and using lasers and/or energy-based devices in unique ways, such as the use of lasers to enhance wound healing.

Directors Kenneth A. Arndt, MD; Murad Alam, MD, MSCI

Faculty Peter R. Shumaker, MD; Jill S. Waibel, MD; E. Victor Ross, MD; Elizabeth L. Tanzi, MD; Carolyn I. Jacob, MD; Emil A. Tanghetti, MD; Arielle N.B. Kauvar, MD; Suzanne L. Kilmer, MD; Andrew C. Krakowski, MD; Jerome M. Garden, MD; Henry H.L. Chan, MD, PhD, FRCP; Roy G. Geronemus, MD

TIME	ACTIVITY
8:00 AM – 8:10 AM	Introduction and Pre-Test – <i>Kenneth A. Arndt, Murad Alam</i>
8:11 AM – 8:28 AM	Prevention and Treatment of Scars – <i>Peter R. Shumaker, Jill S. Waibel</i>
8:29 AM – 8:46 AM	Tightening and Contouring of the Skin (including the neck) – <i>E. Victor Ross, Elizabeth L. Tanzi</i>
8:47 AM – 9:02 AM	Q&A
9:03 AM – 9:20 AM	The Treatment of Hyperhidrosis – <i>Carolyn I. Jacob</i>
9:21 AM – 9:38 AM	Complications of Light and Laser Treatments and How to Avoid Them – <i>Emil A. Tanghetti, Arielle N.B. Kauvar</i>
9:39 AM – 9:54 AM	Q&A
9:55 AM – 10:07 AM	Resurfacing the Skin with Lights, Lasers, RF and Needles – <i>Suzanne L. Kilmer</i>
10:08 AM – 10:23 AM	Use of Lights and Lasers in the Pediatric Population – <i>Andrew C. Krakowski</i>
10:24 AM – 10:39 AM	Q&A
10:40 AM – 10:55 AM	Break
10:56 AM – 11:13 AM	Treatment of Vascular Lesions with Lights and Lasers: How to Choose, Which to Use – <i>Jerome M. Garden</i>
11:14 AM – 11:31 AM	Treatment of Pigmented Lesions with Lights and Lasers – <i>Henry H.L. Chan, Roy G. Geronemus</i>
11:32 AM – 12:00 PM	Conclusion, Q&A, Post-Test - <i>Kenneth A. Arndt, Murad Alam</i>

8:00 AM - 12:00 PM | ROOM: BACK BAY BALLROOM A & B

AMA PRA CATEGORY 1.00 CME CREDITS: 3.75 MAX | CE CONTACT HOURS: 4.50 MAX
ACCME accreditation statement regarding CMEs and CEUs available online

Pediatric Laser Focus - Course

Educational Needs The educational needs are to advance the science and collaboration surrounding pediatric laser medicine; provide education in regards to the safe and effective clinical use of laser and energy devices as they relate to children’s health; and involve residents and trainees in pediatric laser education. These objectives will be accomplished through didactic lectures, an expert panel, and conversation with attendees.

Participants This focus course is open to all designated participants that may be interested in the use of laser and energy devices as they specifically relate to children’s health.

Background Requirements Prior knowledge of lasers and their use in medicine and surgery may be helpful; however, the material presented within the course will be directed at all knowledge levels, including those attendees choosing to learn about pediatric laser medicine for the first time.

Instructional Content/Expected Learning Outcomes Attendees of the course will develop a better understanding of the latest basic science and clinical research in lasers and energy devices as they pertain to pediatric procedural care. Likewise, they will be better able to select appropriate laser and energy device therapies for specific pediatric problems, be better able to anticipate, prevent, and manage adverse events associated with pediatric laser treatments, and collaborate with patients and caregivers to develop treatment plans that meet the specific physical and emotional needs of children. Gaps in attendees’ knowledge and performance will be identified, and the information presented at the course will be used to help improve pediatric clinical outcomes by anticipating and reducing possible complications. The specific nature of this course provides unique opportunities for cross-fertilization of shared ideas by attendees that may help lead to clinical breakthroughs in the field of pediatric procedural care. The ethical implications of treating a uniquely vulnerable pediatric population will also be discussed.

Directors Kristen M. Kelly, MD; Iris Rubin, MD; Andrew C. Krakowski, MD; FAAD

Faculty Charlotte H. Harrison, PhD, JD, MPH; Roy G. Geronemus, MD; Henry H.L. Chan, MD, PhD, FRCP; Michael E. Nemergut, MD; R. Rox Anderson, MD

TIME	ACTIVITY
8:00 AM – 8:05 AM	Introduction and Pre-Test – <i>Kristen M. Kelly, Iris Rubin, Andrew C. Krakowski</i>
8:06 AM – 8:25 AM	Laser Treatment of Vascular Lesions Including Infantile Port Wine Stain Birthmarks and Angiofibromas – <i>Kristen M. Kelly</i>
8:26 AM – 8:35 AM	Laser Treatment of Infantile Hemangiomas – <i>Iris Rubin</i>
8:36 AM – 8:55 AM	Ethical Considerations in Pediatric Laser Surgery: An Introduction – <i>Charlotte H. Harrison</i>
8:56 AM – 9:10 AM	Q&A
9:11 AM – 9:30 AM	Laser Treatment of Scars in Pediatric Patients – <i>Andrew Krakowski</i>
9:31 AM – 9:50 AM	Acne Scars – <i>Roy G. Geronemus</i>
9:51 AM – 10:10 AM	Laser Approach to Pediatric Pigmented Lesions and Considerations when Treating Patients with Skin Types IV-VI – <i>Henry H.L. Chan</i>
10:11 AM – 10:25 AM	Q&A
10:26 AM – 10:40 AM	Break
10:41 AM – 10:50 AM	Patient Experience and Safety Issues in Pediatric Laser Surgery – <i>Iris Rubin</i>
10:51 AM – 11:10 AM	Use of Anesthesia for Laser Surgery – <i>Michael E. Nemergut</i>
11:11 AM – 11:25 AM	Q&A
11:26 AM – 11:45 AM	Future of Pediatric Laser Surgery – <i>R. Rox Anderson</i>
11:46 AM – 12:00 PM	Conclusion, Q&A, Post-Test – <i>Kristen M. Kelly, Iris Rubin, Andrew C. Krakowski</i>

8:00 AM - 5:00 PM | ROOM: BACK BAY BALLROOM C

CE CONTACT HOURS: 9.0 MAX (COURSE AND ABSTRACT SESSION COMBINED)

ACCME accreditation statement regarding CEUs available online

Nursing/Allied Health - Course

Educational Needs The activity is designed to offer an interactive forum for exchange of practical clinical information through lectures and conversations, including new and established technology.

Participants The activity is designed for nurses, clinicians, and other allied health professionals who use laser, light and other energy-based technologies.

Background Requirements Attendees should possess a basic understanding of laser, light and energy-based technologies for cutaneous applications.

Instructional Content/Expected Learning Outcomes Upon conclusion of this activity, the participants will:

- 1) Establish sound understanding of the principles of lasers and other energy technologies
- 2) Learn how to achieve laser compliance in the workplace
- 3) Develop strategies for handling difficult patients to manage their expectations
- 4) Understand steps to building your aesthetic practice
- 5) Understand clinical study management from the sponsor and study site's perspective
- 6) Learn about the benefits of a melanin index reader
- 7) Use multiple modalities to treat skin laxity
- 8) Apply what we learn from our patients

Directors Mary Stoll, RN; Marian O'Hagan, RN, BSN; Andrea M. Morrison, RN

Faculty John E. Hoopman, CMLSO; Cherie Morgan, RNC, NP; Sean Doherty, MD; Michelle Doran, NP; Kathleen Petrell; Jennifer Civiok; E. Victor Ross, MD; Chantal Ward, RN; Mona Greene, RN, MSN; Khalil A. Khatri, MD; Faye Jenkins, RN, BSN; Jill Waibel, MD (speaking during abstract session)

TIME	ACTIVITY
8:00 AM – 8:05 AM	Introduction – <i>Mary Stoll, Marian D. O'Hagan, Andrea M. Morrison</i>
8:06 AM - 8:20 AM	Nursing/Allied Health Information Session and Meeting – <i>Mary Stoll</i>
8:21 AM – 9:06 AM	Let's Talk Some More About Lasers – <i>John Hoopman</i>
9:07 AM – 9:37 AM	Laser Compliance, What Is It and How to Get There or in Other Words How to Stay Out of Hot Water! – <i>Cherie Morgan</i>
9:38 AM – 9:58 AM	Real World Conversations: How to Handle Difficult Patients and Their Expectations – <i>Sean Doherty</i>
9:59 AM – 10:19 AM	How to Build Your Aesthetic Practice, One Step at a Time – <i>Michelle Doran</i>
10:20 AM – 10:30 AM	Q&A
10:31 AM – 10:46 AM	Break
10:47 AM – 11:07 AM	Clinical Study Management: A Study Site's Perspective – <i>Kathleen Petrell</i>
11:08 AM – 11:28 AM	Clinical Study Management: A Sponsor's Perspective – <i>Jennifer Civiok</i>
11:29 AM – 11:49 AM	My Love Affair with a Melanin Index Reader! – <i>E. Victor Ross</i>
11:50 AM – 12:00 PM	Q&A
12:01 PM – 1:29 PM	Lunch
1:30 PM – 1:50 PM	Combining Treatment Modalities for Skin Laxity and Lifting – <i>Chantal Ward</i>
1:51 PM – 2:11 PM	<u>EXCELLENCE IN LASER NURSING/ALLIED HEALTH AWARD RECIPIENT</u> That Was Then, This Is How! – <i>Mary Stoll</i>
2:12 PM – 2:32 PM	The Human Pincushion: The Evolution of Microneedling – <i>Mona Greene</i>
2:33 PM – 2:53 PM	My Patients, My Teachers: What I Learned from My Patients – <i>Khalil A. Khatri</i>

TIME	ACTIVITY
2:54 PM – 3:04 PM	The Need for Additional Laser/Light Education Beyond What the Laser Companies Offer – <i>Faye Jenkins</i>
3:05 PM – 3:15 PM	Q&A, Introduction of Abstract Session

Nursing/Allied Health – Abstract Session

“Hot Topics”

- » Nurses play an integral role in the patient experience by setting appropriate expectations before, during and after a clinical visit. This essential interaction shapes the patients’ perception of his or her treatment.
- » The importance of doing non-invasive resurfacing prior to applying topicals for achieving better results
- » New exciting choices for improving neck appearance.
- » Recent advances in laser technology continue to expand the options for the treatment of many different dermatologic conditions.
- » The use of lasers and related technologies to treat acne has increased due to reliable clinical response, overall ease of treatment, and minimal adverse effects.
- » Age old controversy – IPL - goggles vs. no goggles- what are the risks?

Moderators Andrea M. Morrison, RN; Rebecca Sprague, RN, NP-C

Faculty Jill Waibel, MD

Abstracts

TIME	ABSTR	ACTIVITY
3:16 PM – 3:24 PM	143	NURSING CONSIDERATIONS FOR MAXIMIZING PATIENT SATISFACTION <i>Anne Chapas, Jennifer MacGregor, Katie Corradini*</i> , Shannon Hernandez Union Square Laser Dermatology, New York, NY
3:25 PM – 3:33 PM	144	NON-INVASIVE RESURFACING COMBINED WITH TRANSEPIDERMAL INFUSION <i>Laura McDermott*</i> Rocklin, CA
3:34 PM – 3:42 PM	145	NECK RESURFACING AND CONTOURING TECHNOLOGIES <i>Clare McGrath*</i> , Patricia Roarty, Allison McDonough, Julia Neckman, Roy Geronemus Laser & Skin Surgery Center of New York, New York, NY
3:43 PM – 3:51 PM	146	THINKING OUTSIDE THE LASER BOX - NOVEL USES FOR LASERS <i>Christina Battilana*</i> , Patricia Roarty, Allison McDonough, Julia Neckman, Roy Geronemus Laser & Skin Surgery Center of New York, New York, NY
3:52 PM – 4:00 PM	147	LASER AND RELATED TECHNOLOGIES FOR ACNE <i>Tracy Ovtcharov*</i> , Patricia Roarty, Allison McDonough, Julia Neckman, Roy Geronemus Laser & Skin Surgery Center of New York, New York, NY
4:01 PM – 4:09 PM	LB35	IPL OCULAR SAFETY: THE HAZARDS, THE INJURIES, THE EYEWEAR <i>Patricia Owens*</i> AestheticMed Consulting International LLC, La Quinta, CA
4:10 PM – 4:20 PM		Q&A
4:21 PM – 4:31 PM		Break
4:32 PM – 4:52 PM		Utilizing Multibeam Optical Coherence Tomography (OCT) Technology to Plan and Assess Scar Treatment – <i>Jill Waibel</i>
4:53 PM – 4:56 PM		Q&A
4:57 PM – 5:17 PM		Breakout Sessions: Energy Modalities for Non-Invasive Body Contouring Hot Cold RF
5:18 PM – 5:30 PM		Conclusion, Q&A – <i>Mary Stoll, Marian D. O’Hagan, Andrea M. Morrison, Rebecca Sprague</i>

12:15 PM - 1:15 PM | ROOM: CONSTITUTION BALLROOM B

AMA PRA CATEGORY 1 CME CREDITS: 1.00 MAX | CE CONTACT HOURS: 1.00 MAX
 ACCME accreditation statement regarding CMEs and CEUs available online

Fractional Resurfacing - Masters Luncheon

Educational Needs This activity addresses the educational needs of physicians who are treating patients with fractional technology. Fractional CO₂, non-ablative fractional and fractional erbium ablative will be discussed. The need to understand more advanced techniques will be the focus of this course with a heavy emphasis on clinical applications and treatment techniques and tips.

Participants The ideal participant has some experience with fractional resurfacing; however, physicians with moderate laser experience would be welcome as they explore the possible indications and contraindications of fractional resurfacing.

Background Requirements There are no specific background requirements. This activity is open to anyone interested in fractional resurfacing, despite their experience. However, they should note that the focus is on a more moderate to advanced conversation

Instructional Content/Expected Learning Outcomes The content will include ablative fractional resurfacing with the erbium and CO₂ lasers, as well as non-ablative fractional resurfacing with non-ablative wavelengths and helium laser. Standard and advanced techniques for various entities including cosmetic indications, scars, and various dermatologic conditions will be discussed. Please note that there are other activities that deal with fractional resurfacing specifically for the treatment of scars in a very advanced manner, and this activity discusses scar treatment in a more global focus. A heavy emphasis on clinical training with tips and tricks and specific energy settings will be discussed during this course.

Director Suzanne L. Kilmer, MD

Faculty A. Jay Burns, MD

TIME	ACTIVITY
12:15 PM – 12:20 PM	Introduction and Pre-Test – <i>Suzanne L. Kilmer</i>
12:21 PM – 1:04 PM	Fractional and Ablative Resurfacing – <i>Suzanne L. Kilmer, A. Jay Burns</i>
1:05 PM – 1:15 PM	Conclusion, Q&A, Post-Test – <i>Suzanne L. Kilmer</i>

12:15 PM - 1:15 PM | ROOM: FAIRFAX

AMA PRA CATEGORY 1.00 CME CREDITS: 1.00 MAX | CE CONTACT HOURS: 1.00 MAX
 ACCME accreditation statement regarding CMEs and CEUs available online

Neck Rejuvenation - Masters Luncheon

Educational Needs

- 1) There are multiple invasive and non-invasive techniques for neck rejuvenation. Providers should be knowledgeable about these interventions.
- 2) The anatomy of the neck is complex and a knowledge of its layers is necessary to optimize outcomes.
- 3) The neck is just one part of a larger facial-neck-chest unit. Providers should know how these units interact with each other in any rejuvenation process

Participants Any provider who has plans of integrating neck rejuvenation techniques into their practice.

Background Requirements

- 1) Rudimentary knowledge of neck anatomy.
- 2) Knowledge of light and other energy-based technologies and their interactions in the skin.
- 3) Knowledge of anesthesia and the skin.

Instructional Content/Expected Learning Outcomes

- 1) Design effective neck rejuvenation plans for tightening, texture, color and contour.
- 2) Identify the proper candidates for particular neck rejuvenation procedures.
- 3) Identify the risks of particular neck rejuvenation procedures.

Director E. Victor Ross, MD

Faculty Jason N. Pozner, MD

TIME	ACTIVITY
12:15 PM – 12:20 PM	Introduction and Pre-Test – <i>E. Victor Ross</i>
12:21 PM – 12:36 PM	Neck Anatomy and Neck Photoaging – <i>Jason N. Pozner</i>
12:37 PM – 12:52 PM	Laser, US, and RF Interactions as they Pertain to the Neck – <i>E. Victor Ross</i>
12:53 PM – 1:08 PM	Case Studies, Q&A – <i>E. Victor Ross, Jason N. Pozner</i>
1:09 PM – 1:15 PM	Conclusion, Post-Test – <i>E. Victor Ross</i>

12:15 PM - 1:15 PM | ROOM: INDEPENDENCE WEST

AMA PRA CATEGORY 1.00 CME CREDITS: 1.00 MAX | CE CONTACT HOURS: 1.00 MAX
ACCME accreditation statement regarding CMEs and CEUs available online

Our Favorite Laser Pearls - Masters Luncheon

Educational Needs This luncheon will provide participants with knowledge of how to optimize patient outcomes by selecting the most appropriate device or technique for a given indication, refining treatment parameters and using appropriate pre- and post-operative skin care.

Participants This luncheon is designed for experienced dermatologists and plastic surgeons using lasers for cutaneous applications and are seeking to optimize their therapeutic results.

Background Requirements Participants should be familiar with the use of lasers for cutaneous applications.

Instructional Content/Expected Learning Outcomes Upon conclusion of the luncheon, participants will have a better understanding of how to improve their results and minimize their complications in laser treatment of vascular and pigmented lesions, laser resurfacing, and photodynamic therapy.

Director Jeffrey S. Dover, MD, FRCPC

Faculty Tina S. Alster, MD

TIME	ACTIVITY
12:15 PM – 12:19 PM	Introduction and Pre-Test – <i>Jeffrey Dover</i>
12:20 PM – 12:45 PM	Pearls – <i>Tina Alster</i>
12:46 PM – 1:05 PM	Pearls – <i>Jeffrey Dover</i>
1:06 PM – 1:15 PM	Conclusion, Q&A, Post-Test

12:15 PM - 1:15 PM | ROOM: GARDNER

AMA PRA CATEGORY 1.00 CME CREDITS: 1.00 MAX | CE CONTACT HOURS: 1.00 MAX
ACCME accreditation statement regarding CMEs and CEUs available online

PDT: State-of-the-Art - Masters Luncheon

Educational Needs With increasing interest for the use of photodynamic therapy (PDT) in dermatology, this activity will provide scientific background, recent updates in this field, as well as practical clinical pearls to increase efficacy and safety.

Participants The activity is designed for novice and experienced users of PDT.

Background Requirements Participants should be familiar with the photochemical reactions of PDT.

Instructional Content/Expected Learning Outcomes Upon conclusion of the activity, attendees will have a better understanding of the latest techniques and technologies and photochemical reactions from basics to clinical practice. Time will be allowed for open discussion with experts.

Director Macrene Alexiades, MD, PhD

Faculty Fernanda H. Sakamoto, MD, PhD

TIME	ACTIVITY
12:15 PM – 12:25 PM	Introduction and Pre-Test – <i>Macrene R. Alexiades</i>
12:26 PM – 12:42 PM	Latest Advances in PDT Using Fractional Laser Resurfacing, Short Incubation ALA, Acoustic Pressure Wave and Topical Therapy for the Treatment of Actinic Keratoses and Skin Cancer – <i>Macrene R. Alexiades</i>
12:43 PM – 1:04 PM	Daylight PDT and Update in MAL PDT – <i>Fernanda Sakamoto</i>
1:05 PM – 1:15 PM	Conclusion, Q&A, Post-Test – <i>Macrene R. Alexiades</i>

12:15 PM - 1:15 PM | ROOM: INDEPENDENCE EAST

AMA PRA CATEGORY 1.00 CME CREDITS: 1.00 MAX | CE CONTACT HOURS: 1.00 MAX
 ACCME accreditation statement regarding CMEs and CEUs available online

State-of-the-Art in Tattoo Treatment - Masters Luncheon

Educational Needs Educational needs addressed include overview and update of past, present and future technologies and techniques in laser tattoo removal.

Participants All practitioners may participate, from beginners to seasoned veterans.

Background Requirements Attendees should have basic understanding of laser technology, specifically lasers designed for removal of tattoos.

Instructional Content/Expected Learning Outcomes Upon completion, participants will have obtained an understanding of the latest techniques and technology for the removal of all types of tattoos in various skin types.

Directors Kelly J. Stankiewicz, MD; Klaus Hoffman, MD, PhD

Faculty N/A

TIME	ACTIVITY
12:15 PM – 12:19 PM	Introduction and Pre-Test – <i>Kelly J. Stankiewicz, Klaus Hoffman</i>
12:20 PM – 12:29 PM	Overview of Lasers for Tattoo Removal – <i>Kelly J. Stankiewicz</i>
12:30 PM – 12:54 PM	New Lasers and Concepts – <i>Klaus Hoffman</i>
12:55 PM – 1:04 PM	Cosmetic, Traumatic, and Allergic Tattoo Removal – <i>Kelly J. Stankiewicz</i>
1:05 PM – 1:15 PM	Cases, Conclusion, Q&A, Post-Test – <i>Kelly J. Stankiewicz, Klaus Hoffman</i>

12:15 PM - 1:15 PM | ROOM: COMMONWEALTH

AMA PRA CATEGORY 1.00 CME CREDITS: 1.00 MAX | CE CONTACT HOURS: 1.00 MAX
ACCME accreditation statement regarding CMEs and CEUs available online

What's New in Lasers/Energy-Based Devices - Masters Luncheon

Educational Needs This activity will inform attendees of the new developments in laser technologies that they can use in the office, and teach them how developments are brought from the lab to the office, enabling them to come up with new technological advances themselves.

Participants Individuals performing laser surgery are invited to attend.

Background Requirements There are no specific prerequisites for attending this activity.

Instructional Content/Expected Learning Outcomes The attendees will learn about advances in cutaneous vascular, pigment, hair, tattoo and fractionated lasers, ultrashort picosecond pulsed lasers, and how basic science reinforces these changes. Attendees will learn about advances in body sculpting technologies including cryolipolysis, laser, ultrasound and heat, and how basic science reinforces these changes.

Directors David H. McDaniel, MD; Henry H.L. Chan, MD, PhD, FRCP

Faculty N/A

TIME	ACTIVITY
12:15 PM – 12:20 PM	Introduction and Pre-Test – <i>David H. McDaniel</i>
12:21 PM – 12:34 PM	Latest Advances in Energy-Based Face, Neck and Body Sculpting, and 3D Imaging – <i>David H. McDaniel</i>
12:35 PM – 12:48 PM	Picosecond Pulses for Pigment, Tattoos, Wrinkles, Scarring, Tightening & New Horizons – <i>Henry H.L. Chan</i>
12:49 PM – 1:02 PM	Late-Breaking Updates: Novel Devices, Emerging Technology & Newest Applications of Existing Technology – <i>David H. McDaniel, Henry H.L. Chan</i>
1:03 PM – 1:15 PM	Conclusion, Q&A, Post-Test – <i>Henry H.L. Chan</i>

1:30 PM - 5:30 PM | ROOM: REPUBLIC BALLROOM

AMA PRA CATEGORY 1.00 CME CREDITS: 3.75 MAX | CE CONTACT HOURS: 4.50 MAX
ACCME accreditation statement regarding CMEs and CEUs available online

Combining Injectables with Lasers, Lights and Other Energy-Based Devices - Course

Educational Needs This activity is designed to provide information on how to safely and successfully combine aesthetic procedures.

Participants The target audience includes dermatologists, and laser surgeons who already have a well-developed basic understanding of the uses of lasers and are looking for advanced techniques on how to combine treatments.

Background Requirements Participants should already be familiar with the use of toxins and fillers.

Instructional Content/Expected Learning Outcomes Upon conclusion of the session, physicians will be able to evaluate the potential procedures that could be used safely in combination. This course will describe the potential side effects and complications of performing laser and injections in the same visit. Physician will learn how to integrate filler, toxin and laser procedures into their practice.

Director Gabriela R. Casabona, MD

Faculty Mary Lupo, MD; Mavi Lopez, MD; Melanie Palm, MD, MBA; Terrence C. Keane, MD

TIME	ACTIVITY
1:30 PM – 1:40 PM	Introduction and Pre-Test – <i>Gabriela R. Casabona</i>
1:41 PM – 2:01 PM	Aging Process and Combination of Techniques for Rejuvenation– <i>Gabriela R. Casabona</i>
2:02 PM – 2:22 PM	Laser Resurfacing and Injectables Combination: Do's and Don'ts– <i>Mary Lupo</i>
2:23 PM – 2:43 PM	Focused Ultrasound, Radiofrequency and Tightening Devices Combination Therapy – <i>Mavi Lopez</i>
2:44 PM – 3:04 PM	Light Devices: Best Combination – <i>Melanie Palm</i>
3:05 PM – 3:25 PM	Combination Therapy for Men – <i>Terrence C. Keane</i>
3:26 PM – 3:46 PM	Off Face Combination Therapies: Best of Chest and Neck – <i>Gabriela R. Casabona</i>
3:47 PM – 4:07 PM	What Does the Data Say About Combination Therapy – <i>Melanie Palm</i>
4:08 PM – 4:28 PM	Q&A
4:29 PM – 4:45 PM	Break
4:46 PM – 5:20 PM	Case Presentations - <i>Gabriela R. Casabona, Mary Lupo, Mavi Lopez, Terrence C. Keane</i>
5:21 PM – 5:30 PM	Conclusion, Q&A, Post-Test – <i>Gabriela R. Casabona</i>

1:30 PM - 5:30 PM | ROOM: BACK BAY BALLROOM A & B

AMA PRA CATEGORY 1.00 CME CREDITS: 3.75 MAX | CE CONTACT HOURS: 4.50 MAX
 ACCME accreditation statement regarding CMEs and CEUs available online

Device-Based Resurfacing, Rejuvenation and Recontouring - Course

Educational Needs The objectives of this activity will be to present real and objective data on the devices and optimal techniques available for facial rejuvenation and body contouring.

Participants This activity is aimed at physicians who wish to enhance their understanding of best practice methods in rejuvenation and body contouring.

Background Requirements The prospective participant should ideally have a working understanding of the types of devices used in skin rejuvenation and non-invasive fat reduction. While this is not necessarily aimed at the novice, the material included will be very useful in providing a framework concerning optimal devices and will be enhanced by at least 25% of the time being devoted to an interactive discussion on each topic.

Instructional Content/Expected Learning Outcomes It is expected that participants in this activity will be able to integrate this information into their knowledge base and improve competence, and patient outcomes. The format of this activity will allow participants to ask specific questions, which could be answered in an open discussion format or privately after the session has been completed if preferred.

Directors Christine C. Dierickx, MD; Arielle N.B. Kauvar, MD

Faculty Paul M. Friedman, MD; Matteo Tretti Clementoni, MD; Suzanne L. Kilmer, MD; Merete Haedersdal, MD, PhD, MSc; Elizabeth L. Tanzi, MD; Mitchel Goldman, MD; A. Jay Burns, MD

TIME	ACTIVITY
1:30 PM - 1:35 PM	Introduction and Pre-Test – <i>Christine D. Dierickx, Arielle N.B. Kauvar</i>
1:36 PM – 1:56 PM	Non-Ablative Fractional Laser Resurfacing: My Approach – <i>Paul M. Friedman</i>
1:57 PM – 2:17 PM	Ablative Fractional Laser Resurfacing: My Approach – <i>Matteo Tretti Clementoni</i>
2:18 PM – 2:38 PM	Ablative Laser Resurfacing: My Approach – <i>Suzanne L. Kilmer</i>
2:39 PM – 2:59 PM	The Role of PDT – <i>Merete Haedersdal</i>
3:00 PM – 3:20 PM	Laser Resurfacing of Scars: My Approach – <i>Arielle N.B. Kauvar</i>
3:21 PM – 3:36 PM	Q&A
3:37 PM – 3:52 PM	Break
3:53 PM – 4:13 PM	Face and Neck Tightening and Contouring: My Approach – <i>Elizabeth L. Tanzi</i>
4:14 PM – 4:34 PM	Body Tightening and Contouring: My Approach – <i>Mitchel Goldman</i>
4:35 PM – 4:55 PM	Do We Still Need Surgery for Rejuvenation and Contouring – <i>A. Jay Burns</i>
4:56 PM – 5:16 PM	Newest Trends: Home Use Devices, Microneedling, Fractional Delivery of Cosmeceuticals and Fractional Picosecond – <i>Christine D. Dierickx</i>
5:17 PM – 5:30 PM	Conclusion, Q&A, Post-Test – <i>Christine D. Dierickx, Arielle N.B. Kauvar</i>

6:45 AM - 8:00 AM | ROOM: HYNES 104

AMA PRA CATEGORY 1.00 CME CREDITS: 1.25 MAX | CE CONTACT HOURS: 1.50 MAX
ACCME accreditation statement regarding CMEs and CEUs available online

Cellulite - Masters Breakfast

Educational Needs Understand the pathophysiology of cellulite as well as different energy-based devices employed to improve its appearance.

Participants Practitioners with an interest in cellulite management with a particular emphasis on invasive technologies. The target audience will be those looking to learn how to manage cellulite with devices, and for those already treating cellulite to enhance their techniques and avoid pitfalls.

Background Requirements There are no specific background requirements.

Instructional Content/Expected Learning Outcomes It is anticipated that participants will further their knowledge base on the diagnosis of cellulite as well as identifying which devices would most likely suit the needs of their practice.

Director Jeremy B. Green, MD

Faculty Klaus Hoffmann, MD

TIME	ACTIVITY
6:45 AM – 6:50 AM	Introduction and Pre-Test – <i>Jeremy B. Green</i>
6:51 AM – 6:59 AM	Cellulite Background / Non-Invasive Treatment Landscape – <i>Jeremy B. Green</i>
7:00 AM – 7:27 AM	Cellulaze & Q&A – <i>Klaus Hoffmann</i>
7:28 AM – 7:54 AM	Cellfina & Q&A – <i>Jeremy B. Green</i>
7:55 AM – 8:00 AM	Conclusion and Post-Test – <i>Jeremy B. Green</i>

6:45 AM - 8:00 AM | ROOM: HYNES 103

AMA PRA CATEGORY 1.00 CME CREDITS: 1.25 MAX | CE CONTACT HOURS: 1.50 MAX
ACCME accreditation statement regarding CMEs and CEUs available online

Optimizing Patient Experience - Masters Breakfast

Educational Needs Clinical mastery of laser and energy devices is a prerequisite to using them successfully in clinical practice. But even the most talented laser surgeon needs a steady supply of patients to remain in business. This activity focuses on proven means for creating a great patient experience, meeting their needs and keeping them coming back.

Participants This activity is designed for clinicians who are interested in maximizing patient satisfaction and retention.

Background Requirements There are no specific prerequisites for attending this activity.

Instructional Content/Expected Learning Outcomes Upon conclusion of this activity, participants will:

- 1) Develop ideas for maximizing clinical space, utilizing staff for maximal efficiency, and maintaining smooth patient flow in a busy laser practice.
- 2) Utilize the initial consultation as a tool for enhancing patient satisfaction.
- 3) Understand methods to expand patient referrals and retain existing patients.
- 4) Incorporate strategies for managing difficult patient cases and avoiding common pitfalls.

Director Ashish C. Bhatia, MD, FAAD

Faculty Kavita Mariwalla, MD; Whitney Bowe, MD; Shuai "Steve" Xu, MD; Jeffrey S. Dover, MD

TIME	ACTIVITY
6:45 AM – 6:50 AM	Introduction and Pre-Test – <i>Ashish C. Bhatia</i>
6:51 AM – 7:00 AM	Improving the Patient Experience at Their First Visit – <i>Kavita Mariwalla</i>
7:01 AM – 7:10 AM	Tips for Retaining Patients in Your Practice – <i>Whitney Bowe</i>
7:11 AM – 7:20 AM	Maximizing your Laser Practice – <i>Ashish C. Bhatia</i>
7:21 AM – 7:30 AM	Q&A
7:31 AM – 7:40 AM	Patient Online Reviews of Laser & Light Procedures: Pitfalls and Insights – <i>Shuai "Steve" Xu</i>
7:41 AM – 7:50 AM	Attracting Patients and Keeping Them – <i>Jeffrey S. Dover</i>
7:51 AM – 8:00 AM	Conclusion, Q&A, Post-Test – <i>Ashish C. Bhatia</i>

6:45 AM - 8:00 AM | ROOM: HYNES 102

AMA PRA CATEGORY 1.00 CME CREDITS: 1.25 MAX | CE CONTACT HOURS: 1.50 MAX
ACCME accreditation statement regarding CMEs and CEUs available online

Scar Wars - Masters Breakfast

Educational Needs Identification of different treatment techniques for scar revision.

Participants Dermatologists, plastic surgeons, and other practitioners who consult on and treat scars.

Background Requirements There are no specific background requirements (basic laser experience helpful).

Instructional Content/Expected Learning Outcomes

- 1) Properly categorize scars and identify best lasers/devices and timing for treatment.
- 2) Outline proper laser treatment parameters and intervals.
- 3) Understand how to combine treatments in order to enhance clinical outcome.

Directors Nathan S. Uebelhoer, DO; Andrew S. Krakowski, MD, FAAD

Faculty N/A

TIME	ACTIVITY
6:45 AM – 7:00 AM	Introduction and Pre-Test – <i>Nathan Uebelhoer, Andrew Krakowski</i>
7:01 AM – 7:23 AM	Adult Scar Revision – <i>Nathan Uebelhoer</i>
7:24 AM – 7:44 AM	Pediatric Scar Revision – <i>Andrew Krakowski</i>
7:45 AM – 8:00 AM	Conclusion, Q&A, Post-Test – <i>Nathan Uebelhoer, Andrew Krakowski</i>

8:00 AM - 10:00 AM | ROOM: BACK BAY BALLROOM A & B

AMA PRA CATEGORY 1.00 CME CREDITS: 2.00 MAX | CE CONTACT HOURS: 2.00 MAX
ACCME accreditation statement regarding CMEs and CEUs available online

Safety Compliance in the Practice Environment - Workshop

Educational Needs The educational activity will address the specifics on collaborative practices within a medical aesthetic facility, the safety control measures associated with each device, national and international laser safety regulations and standards, along with the State specifics of Physician delegation and Nursing/Allied Health scope of practice. This activity will address knowledge gap issues and provide information and strategies to incorporate evidence-based best practices for patient safety and the achievement of better outcomes.

Participants The activity is designed for the beginner and experienced physicians, allied health personnel and industry members who are involved in a clinical based aesthetic practice.

Background Requirements Participants need to have an understanding of basic laser / energy-based technology along with knowledge of skin anatomy.

Instructional Content/Expected Learning Outcomes Upon the conclusion of this session, attendees will be able to:

- 1) Identify the different types of professionals and their scopes of practice working within a collaborative aesthetic facility.
- 2) Apply the ANSI standards along with other national safety regulations for the future care of patients.
- 3) Incorporate strategies in order to analyze the medical-legal aspects of a collaborative aesthetic practice in a variety of states.

Director Patricia A. Owens, RN, MHA, CMLSO, CNOR

Faculty Rebecca L. Sprague, NP-C, BSN; Elizabeth L. Tanzi, MD; Raymond J. Lanzafame, MD, MBA, FACS; Patrick J. Clark, CMLSO

TIME	ACTIVITY
8:00 AM – 8:05 AM	Introduction, Self-Evaluation Questions – <i>Patricia A. Owens</i>
8:06 AM – 8:25 AM	Nursing/Allied Health Roles and Best Aesthetic Practices – <i>Rebecca L. Sprague</i>
8:26 AM – 8:46 AM	Physician Supervisory Role and Best Practices with Ablative Laser and Energy-Based Resurfacing – <i>Elizabeth L. Tanzi</i>
8:47 AM – 8:55 AM	Q&A
8:56 AM – 9:13 AM	ANSI Z136.3 Laser Safety Standards, the LSO and the Office-Based Compliance – <i>Raymond J. Lanzafame</i>
9:14 AM – 9:33 AM	Risk Management: The Key to Compliance – <i>Patrick J. Clark</i>
9:34 AM – 9:50 AM	State Licensing Boards – The Spectrum of Compliance – <i>Patricia A. Owens</i>
9:51 AM – 10:00 AM	Conclusion, Q&A, Self-Evaluation – <i>Patricia A. Owens</i>

8:00 AM - 10:00 AM | ROOM: REPUBLIC BALLROOM

AMA PRA CATEGORY 1.00 CME CREDITS: 2.00 MAX | CE CONTACT HOURS: 2.00 MAX
ACCME accreditation statement regarding CMEs and CEUs available online

ASLMS/ALD Laser Dental Applications - Workshop

Educational Needs To outline the breadth of applications of light based devices in clinical dentistry with an eye to research currently being conducted in the field of lasers in dentistry.

Participants Clinical dentists and dental specialists, dental researchers.

Background Requirements Craniofacial biology, microbiology, optics and medicine-dentistry.

Instructional Content/Expected Learning Outcomes The workshop will highlight the wide range of potential applications of light-based technologies in clinical dentistry and provide a biological rationale with the desired clinical outcome. The participants will learn the utility of using specific light-based modalities to address their clinical needs in routine dentistry and oral surgery.

Director Christopher J. Walinski, DDS

Faculty Nikolaos Soukos, DDS, PhD; Craig R. Sanford, DDS; Martin Kaplan, DMD; Mel Burchman, DDS, MALD

TIME	ACTIVITY
8:00 AM – 8:04 AM	Introduction and Pre-Test – <i>Christopher J. Walinski</i>
8:05 AM – 8:26 AM	Antibacterial Action of Blue Light – <i>Nikolaos Soukos</i>
8:27 AM – 8:48 AM	All Tissue Lasers Enhancing Dental Surgery in a General Practice – <i>Craig R. Sanford</i>
8:49 AM – 9:10 AM	An Integrated Multi-Discipline Approach to Infant Tongue Tie and Lip Tie Physiology, Diagnostics, Laser Release, Tissue Healing and Post Op Care – <i>Martin Kaplan</i>
9:11 AM – 9:32 AM	Surface Effects of Various Laser Wavelengths on Titanium Implant Surfaces: An SEM Exploration – <i>Christopher J. Walinski</i>
9:33 AM – 9:54 AM	Dental Lasers in Medically Compromised Patients – <i>Mel Burchman</i>
9:55 AM – 10:00 AM	Conclusion, Q&A, Post-Test – <i>Christopher J. Walinski</i>

8:00 AM – 10:00 AM | ROOM: BACK BAY BALLROOM C & D

AMA PRA CATEGORY 1 CME CREDITS: 2.00 MAX | CE CONTACT HOURS: 2.00 MAX
ACCME accreditation statement regarding CMEs and CEUs available online

Complications, Legal Issues and Laser Safety - Workshop

Educational Needs This activity will focus on energy-based device safety, cutaneous and ophthalmic complications from such devices, prevention of complications, how to prevent a lawsuit and physician extender issues. Knowledge of safety, both theoretical and applied, is required by OSHA, ANSI, state regulations, professional bodies, and local facility based policies. Safety is a dynamic topic, changing and evolving constantly, and therefore becomes an area of education that must be offered periodically by experts in the field who are able to provide the most current information to users.

Participants This activity is designed for physicians and designated extenders using energy-based devices. All professionals are required to obtain safety education, and therefore, there are no inclusions or exclusions on attendance. It is hoped that this barrier free workshop will be marketed as such, inviting physicians, nurses, industry partners, administrators, scientists, allied health workers, and anyone else interested in the safe and appropriate use of lasers in compliance with regulations and standards.

Background Requirements No background is required for this activity.

Instructional Content/Expected Learning Outcomes It is expected that participants will:

- 1) Learn about energy-based device safety, cutaneous and ophthalmic complications from such devices, prevention of complications, how to prevent a lawsuit and physician extender issues.
- 2) Assess their current practice for compliance with ANSI standards with regard to use of laser protective eyewear, use of 3rd party (rental) laser systems, and administrative policies.
- 3) Compare and contrast the application of ANSI standards between laser use in a hospital practice setting and laser use in a private practice.
- 4) Discuss options for education and training of laser team members that will meet the requirements mandated in ANSI standards, and other relevant regulations and guidelines.

Directors Mathew M. Avram, MD, JD; Joel L. Cohen, MD, FAAD, FACMS

Faculty/Speakers Arisa E. Ortiz, MD; H. Ray Jalian, MD, JD; Brian S. Biesman, MD; Anne Marie Tremaine, MD

TIME	ACTIVITY
8:00 AM – 8:05 AM	Introduction and Pre-Test – <i>Mathew M. Avram, Joel L. Cohen</i>
8:06 AM – 8:20 AM	Laser Safety – <i>Arisa E. Ortiz</i>
8:21 AM – 8:50 AM	Legal Issues Regarding Lasers, Light Sources and Energy-Based Devices – <i>Mathew M. Avram</i>
8:51 AM – 9:10 AM	Lasers and Lawsuits – <i>H. Ray Jalian</i>
9:11 AM – 9:25 AM	Testing Around the Eyes Safely – <i>Brian S. Biesman</i>
9:26 AM – 9:31 AM	Laser, Light Source and Energy-Based Device Complications – <i>Anne Marie Tremaine</i>
9:32 AM – 9:50 AM	Complications with Lasers, Other Energy-Based Devices, and Combination Therapy with Injectables – <i>Joel L. Cohen</i>
9:51 AM – 10:00 AM	Conclusion, Q&A, Post-Test

8:00 AM - 10:00 AM | ROOM: HYNES AUDITORIUM

AMA PRA CATEGORY 1.00 CME CREDITS: 2.00 MAX | CE CONTACT HOURS: 2.00 MAX
ACCME accreditation statement regarding CMEs and CEUs available online

Gynecologic and Cutaneous Therapeutic Challenges and New Treatments - Workshop

Educational Needs The purpose of this workshop is to introduce the audience, in a structured and unbiased fashion, to new therapeutic options for the treatment of common dermatologic and gynecologic conditions. The issues to be discussed at this workshop include but are not limited to:

- 1) The latest technology for laser skin resurfacing.
- 2) Picolasers for tattoo removal and other applications.
- 3) Non-surgical skin tightening with needle-based Radiofrequency devices.
- 4) Update on non-surgical fat removal.
- 5) Discussion on the device-based treatments for urinary incontinence and vulvovestibular disorders.

Participants This workshop is designed to educate both physician and non-physician providers on the therapeutic options for the aforementioned treatments.

Background Requirements A strong interest in learning about device treatments for the aforementioned conditions. It helps if there is experience providing laser or other device treatments for cosmetic treatment of conditions in their patients practice.

Instructional Content/Expected Learning Outcomes Through the utilization of pre and post lecture question and answer sessions, it is our hope that the audience will identify areas of strengths and weaknesses in their knowledge base for treatment and be able to discuss specific methods with the faculty and other audience members' specific methods for improving treatment algorithms and optimal treatment settings.

Directors Macrene Alexiades, MD; Elizabeth Tanzi, MD

Faculty Red M. Alinsod, MD; Michael S. Baggish, MD; Robert A. Weiss, MD

TIME	ACTIVITY
8:00 AM – 8:05 AM	Introduction and Pre-Test – <i>Macrene Alexiades</i>
8:06 AM – 8:23 AM	Urinary Incontinence – <i>Red M. Alinsod</i>
8:24 AM – 8:41 AM	Vulvovestibular Disorders – <i>Michael S. Baggish</i>
8:42 AM – 8:59 AM	Pico / Body Contouring – <i>Robert A Weiss</i>
9:00 AM – 9:17 AM	Non-Surgical Lifting with RF Needling – <i>Macrene Alexiades</i>
9:18 AM – 9:35 AM	What's New in Resurfacing – <i>Elizabeth Tanzi</i>
9:36 AM – 10:00 AM	Conclusion, Q&A, Post-Test – <i>Macrene Alexiades, Elizabeth Tanzi</i>

Plenary Session

Presiding Robert A. Weiss, ASLMS President, 2015-2016

Program Chairs Jeremy B. Green, MD; Ashish C. Bhatia, MD, FAAD; Ron R. Allison, MD

Keynote Speaker

Robert S. Afzal, PhD – Senior Fellow Lockheed Martin: Mission Systems & Training – Ship and Aviation Systems

Special Speakers

Praveen Arany, DDS, PhD – Dr. Horace Furumoto Innovations Professional Development: Young Investigator Award

Mickey M. Karram, MD – Director of Fellowship Program Female Pelvic Medicine & Reconstructive Surgery, The Christ Hospital and Professor of OB/GYN & Urology, University of Cincinnati

TIME	ACTIVITY
10:30 AM – 10:35 AM	Program Chair Welcome – <i>Jeremy B. Green, Ashish C. Bhatia, Ron R. Allison</i>
10:36 AM – 10:42 AM	Presidential Address – <i>Robert A. Weiss</i>
10:43 AM – 11:08 AM	Award Presentations <ul style="list-style-type: none"> • Presidential Citations • Excellence in Education Recognition • Caroline and William Mark Memorial Award • Leon Goldman Memorial Award • Ellet H. Drake Memorial Award • Excellence in Laser Nursing/Allied Health Award • Best Overall Basic Science and Translational Research Award • Dr. Richard E. Fitzpatrick Clinical Research and Innovations Award • Kerith Foundation Award for Best of Photobiomodulation Abstract Session • Best of Session Abstract Awards • Outstanding Early Career Session Abstract Awards
11:09 AM – 11:15 AM	Dr. Horace Furumoto Innovations Professional Development: Young Investigator Award <ul style="list-style-type: none"> • Praveen Arany, DDS, PhD • Talk Title – <i>Low Dose Clinical Biophotonics: Molecular Mechanisms Are Driving Precision Medicine Therapies</i>
11:16 AM – 11:26 AM	Feature Speaker: Women's Health and Gynecology <ul style="list-style-type: none"> • Mickey M. Karram, MD • Talk Title – <i>Energy Sources Used for Female Sexual Dysfunction/Enhancement; Do They Really Work?</i>
11:27 AM – 11:55 AM	Keynote Speaker: High Power Lasers <ul style="list-style-type: none"> • Robert S. Afzal, PhD • Talk Title – <i>Directed Energy Lasers: Near the Tipping Point</i>
11:56 AM – 11:59 AM	Conclusion/Transition to ASLMS Business Meeting – <i>Robert A. Weiss</i>
12:00 PM – 12:30 PM	ASLMS Business Meeting (members only)



1:00 PM - 4:30 PM | ROOM: HYNES 107

ASLMS/ALD Laser Dental Applications – Abstract Session

Laser Dental Session

Educational Needs The use of lasers in dentistry spans a wide range of clinical applications from curing lights to surgical-cautery tools and for specific treatments such as antimicrobial PDT and Photobiomodulation therapy.

Participants Trainees, practicing clinicians and laser experts.

Background Requirements Fundamentals of laser physics, laser-tissue interactions.

Instructional Content/Expected Learning Outcomes Understand the breadth of various laser applications in dentistry; appreciate the technical nuances of using the laser device for specific applications; appreciate the limitations of the laser device parameters in clinical dentistry.

“Hot Topics”

- » Lasers as an innovative tool for clinical dental surgery.
- » Lasers for antimicrobial photodynamic therapy in periodontics.
- » Low dose laser applications to alleviate pain and inflammation and promote healing.

Chairs Praveen Arany, DDS, PhD; Mel Burchman, DDS, MALD

Pain, Inflammation and Healing

TIME	ABSTR	ACTIVITY
1:00 PM - 1:10 PM	128	THE USE OF THE Er:YAG LASER IN A PERIODONTAL BONE GRAFT AND ENDODONTIC RE-TREATMENT <i>Craig Sanford*</i> Nantucket, MA
1:11 PM - 1:21 PM	129	EVIDENCE BASED USE OF PHOTOBIO-MODULATION IN PERIODONTICS – A LITERATURE SEARCH <i>Gerry Ross*</i> Tottenham, Ontario, Canada
1:22 PM - 1:32 PM	130	OUTPUT POWER AND SPATIAL BEAM DISTRIBUTION CHARACTERIZATION OF TWO DENTAL DIODE LASER SYSTEMS <i>Inder Raj Makin*</i> , <i>Chandhana Pedapati</i> , <i>Varisha Parikh</i> , <i>Robert Levine</i> , <i>Marc Shlossman</i> A.T. Still University, Mesa, AZ
1:33 PM - 1:43 PM	131	BONE REPAIR: A COMPARATIVE HISTOLOGICAL AND HISTOMORPHOMETRIC STUDY, IN RAT TIBIAE, WITH THREE DIFFERENT METHODS OF OSTEOTOMY <i>Joao Braga*</i> , <i>Orlando Martins</i> , <i>Joao Carlos Ramos</i> , <i>Fernando Guerra</i> , <i>Francisco Caramelo</i> , <i>Joao Brochado Martins</i> , <i>Maria Luisa Guardão</i> , <i>Inês Guerra Pereira</i> , <i>Ricardo Faria e Almeida</i> , <i>António Felino</i> Ordem dos Medicos Dentistas, Coimbra, Aveiro, Porto, Portugal; Faculdade de Medicina da Universidade, Coimbra, Porto, Portugal
1:44 PM - 1:54 PM	132	USING DENTAL LASERS TO TREAT THE MEDICALLY COMPROMISED PATIENT - PART 2 <i>Mel Burchman*</i> Langhorne, PA
1:55 PM - 2:15 PM		Q & A
2:16 PM - 2:59 PM		BREAK – View ePosters and visit the Exhibit Hall

Antimicrobial Photodynamic Therapy in Periodontics

TIME	ABSTR	ACTIVITY
3:00 PM - 3:10 PM	133	PHOTOTHERAPY AND ANTIMICROBIAL CONCEPTS IN LASER DENTISTRY <i>Arun Darbar*</i> , <i>Rita Darbar</i> Smile Creations Dental Innovations, Leighton Buzzard, United Kingdom

TIME	ABSTR	ACTIVITY
3:11 PM – 3:21 PM	LB33	CORRELATION OF ROUGHNESS AND MICROSHEAR BOND STRENGTH OF Er,Cr:YSGG LASER IRRADIATION ON ZIRCONIA <i>Pedro Oliveira</i> ★, <i>Leonardo Zeidan</i> , <i>Juliana Barroso</i> , <i>José Rodrigues</i> , <i>Jean Roulet</i> , <i>Alessandra Cassoni</i> Guarulhos University, Guarulhos, Brazil; University of Florida, Gainesville, FL

Clinical Dental Surgery

TIME	ABSTR	ACTIVITY
3:22 PM – 3:32 PM	134	COMPARATIVE EVALUATION OF ANTIMICROBIAL PHOTODYNAMIC THERAPY, DIODE LASER AND Er,Cr:YSGG LASER ASSISTED PERIODONTAL POCKET THERAPY IN TREATMENT OF CHRONIC PERIODONTITIS : A PROSPECTIVE, RANDOMIZED, SPLIT-MOUTH STUDY <i>Neha Yadav</i> ★→, <i>Arundeeep Kaur</i> , <i>Farrukh Faraz</i> , <i>Shruti Tandon</i> , <i>Mahesh Verma</i> New Delhi, India
3:33 PM – 3:43 PM	135	810nm LASER FOR VESTIBULOPLASTY IN THE PROPHYLAXIS AND IN THE TREATMENT OF PERIIMPLANTITIS <i>Roman Smucler</i> ★ Charles University, Prague, Czech Republic
3:44 PM – 3:54 PM	136	COMBINED APPROACH TO TREAT MEDICATION-RELATED OSTEONECROSIS OF THE JAWS <i>Elisabetta Merigo</i> ★, <i>Luigi Cella</i> , <i>Fabio Clini</i> , <i>Carlo Fornaini</i> , <i>Matteo Fontana</i> , <i>Aldo Oppici</i> Piacenza, Italy
3:55 PM – 4:05 PM	LB34	ERBIUM YTTRIUM ALUMINUM GARNET (Er:YAG) LASER EFFECTS ON DIFFERENT ORTHODONTIC ADHESIVE RESINS, A PILOT STUDY <i>John Palmer</i> , <i>Thomas Mang</i> ★, <i>Thikriat AlJewair</i> , <i>Sawsan Tabbaa</i> University at Buffalo, Buffalo, NY
4:06 PM – 4:30 PM		Q & A

1:00 PM - 4:30 PM | ROOM: HYNES 104

ASLMS/PAPDT PDT – Abstract Session and PAPDT Meeting*Dermatology and Clinical PDT Session*

Educational Needs The session will review and highlight the state of the art in clinical and basic science of Photodynamic Therapy.

Participants For this session, participants should include clinicians, scientists, nurses, students and members of industry interested in PDT.

Background Requirements No special background is required.

Instructional Content/Expected Learning Outcomes It is expected that participants in these activities will identify gaps in their knowledge, competence, or performance.

“Hot Topics”

- » The use of PDT in brain tumors and Glioblastoma-innovative therapy that may improve outcomes for this highly aggressive cancer.
- » The new light fabric allows for simple and reproducible PDT to treat various cancers of skin and body.
- » The use of antimicrobial PDT, as antibiotics become less effective, PDT has become an important option.

Chairs Merrill A. Biel, MD, PhD; Ron R. Allison, MD

Speakers Macrene R. Alexiades, MD, PhD; Serge R. Mordon, PhD; Thomas S. Mang, PhD; Merete Haedersdal, MD, PhD, DMSc; Keith Cengel, MD, PhD; Herbert C. Wolfsen, MD

Dermatology Session - Speakers

TIME	ACTIVITY
1:00 PM – 1:05 PM	Introduction – <i>Ron R. Allison</i>
1:06 PM – 1:15 PM	PDT: Fundamentals – Drugs – <i>Macrene R. Alexiades</i>
1:16 PM – 1:25 PM	PDT: Fundamentals – Lights – <i>Serge R. Mordon</i>
1:26 AM – 1:35 PM	PDT: Fundamentals – Reactions – <i>Thomas S. Mang</i>
1:36 AM – 1:52 PM	Derm: State-of-the-Art – <i>Merete Haedersdal</i>
1:53 AM – 2:07 PM	Derm: State-of-the-Art – <i>Macrene Alexiades</i>
2:08 AM – 2:15 PM	Q & A
2:16 AM - 2:59 PM	BREAK – View ePosters and Visit the Exhibit Hall

Clinical PDT Session - Speakers

TIME	ACTIVITY
3:00 PM – 3:19 PM	Derm – <i>Merete Haedersdal</i>
3:20 PM – 3:39 PM	ENT – <i>Merrill A. Biel</i>
3:40 PM – 3:50 PM	Thoracic- <i>Keith Cengel</i>
3:51 PM – 4:01 PM	GI – <i>Herbert C. Wolfsen</i>
4:02 PM – 4:06 PM	Q & A

Clinical Abstracts

TIME	ABSTR	ACTIVITY
4:07 PM – 4:15 PM	148	COMPARISON OF TWO FLUENCE RATES IN THE PHOTODYNAMIC TREATMENT OF ACTINIC KERATOSIS USING MATHEMATICAL MODELING <i>Anne-Sophie Vignon*</i> , <i>Nacim Betrouni, Clément Dupont, Jean-Baptiste Tylcz, Claire Vicentini, Serge Mordon</i> <i>University Lille, Inserm, CHU Lille, U1189 - ONCO-THAI - Image Assisted Laser Therapy for Oncology, F-59000 Lille, France</i>
4:16 PM – 4:24 PM	149	PHASE II STUDY EVALUATING THE NON-INFERIORITY OF THE DEVICE FLEXITHERALIGHT® COMPARED TO CONVENTIONAL PDT <i>Claire Vicentini*→</i> , <i>Jean-Baptiste Tylcz, Cyril Maire, Nacim Betrouni, Laurent Mortier, Serge Mordon</i> , <i>Clinic of Dermatology, Lille University Hospital, U1189 -ONCO-THAI Lille, France</i>
4:25 PM – 4:30 PM		Q & A



1:00 PM - 4:30 PM | ROOM: HYNES 102

Basic Science & Translational Research – Abstract Session

Educational Needs These sessions promote understanding of basic processes of light interaction with tissue and cells, design of light-based diagnostic and therapeutic devices and techniques, and early translation of this knowledge to clinical application.

Participants Scientists, engineers, medical practitioners as well as other healthcare professionals involved in biomedical applications of lasers are invited to attend.

Background Requirements Participants should have a basic understanding or experience of how light interacts with tissues.

Instructional Content/Expected Learning Outcomes These sessions will provide attendees knowledge of cutting-edge advances in optical diagnostics and therapeutics, and their early translation to the clinical management of patients. Novel results are presented that will impact the development of new and more efficacious, light-based diagnostic and therapeutic devices and applications. Characterization of light sources and safety issues are also considered.

“Hot Topics”

- » New Applications of Preclinical/Clinical Therapeutic Technology.
- » Novel Imaging Modalities for Disease Diagnosis.

Chairs Thomas S. Mang, PhD; Serge R. Mordon, PhD

Laser Tissue Interaction

TIME	ABSTR	ACTIVITY
1:00 PM – 1:10 PM	1	THE IMPORTANCE OF ARRHENIUS DENATURATION RATE ANALYSIS IN SELECTIVE PHOTOTHERMOLYSIS OF VASCULAR LESIONS; MODELLING OF PWS VESSEL WALL DENATURATION <i>Per-Arne Torstensson*</i> , <i>Michael Murphy</i> Optopia, Kungsbacka, Sweden; Dermalase, Glasgow, United Kingdom
1:11 PM – 1:21 PM	2	THEORETICAL ANALYSIS OF THE MECHANISM PRODUCING THE HISTOLOGICALLY OBSERVED EPIDERMAL CHANGES WITH A PICOSECOND ALEXANDRITE LASER WITH DIFFRACTIVE LENS ARRAY <i>Mirko Mirkov*</i> , <i>Rafael Sierra</i> , <i>Emil Tanghetti</i> Cynosure, Inc., Westford, MA; Center for Dermatology and Laser Surgery, Sacramento, CA
1:22 PM – 1:32 PM	3	USE OF FIBER LASERS IN THE ORAL SOFT TISSUE SURGERY: PRELIMINARY EX VIVO STUDY <i>Carlo Fornaini*</i> , <i>Elisabetta Merigo</i> , <i>Helene Raybaud</i> , <i>Jean-Paul Rocca</i> , <i>Stefano Selleri</i> , <i>Annamaria Cucinotta</i> GAEM, University of Parma, Parma, Italy; Micoralis Laboratory, University of Nice, Nice, France
1:33 PM – 1:43 PM	4	IN VIVO CONFOCAL MICROSCOPIC FINDINGS BY DIFFERENT IRRADIATION METHODS OF 532nm Q-SWITCHED, FREQUENCY-DOUBLED NEODIMIUM DOPED YTTRIUM-ALUMINUM-GARNET LASER <i>Boncheol Goo*</i> , <i>Sung Bin Cho</i> , <i>Beom Jun Kim</i> Naeum Dermatology and Aesthetic Clinic, Seoul, Korea; Chung-Ang University Hospital, Seoul, Korea
1:44 PM – 1:54 PM	5	COAGULATION ZONE THICKNESS INFLUENCES ABLATIVE FRACTIONAL LASER-ASSISTED DRUG DELIVERY <i>Christina S Haak*</i> , <i>Jens Hannibal</i> , <i>Uwe Paasch</i> , <i>R. Rox Anderson</i> , <i>Merete Haedersdal</i> Bispebjerg University Hospital, Copenhagen, Denmark; University of Leipzig, Leipzig, Germany; Wellman Center for Photomedicine, Massachusetts General Hospital, Harvard Medical School, Boston, MA
1:55 PM – 2:15 PM		Q & A
2:16 PM – 2:59 PM		BREAK – View ePosters and Visit the Exhibit Hall

Photodynamic Therapy

TIME	ABSTR	ACTIVITY
3:00 PM – 3:10 PM	6	SKIN TUMOUR DEVELOPMENT AFTER UV IRRADIATION AND PHOTODYNAMIC THERAPY IS UNAFFECTED BY SHORT-TERM PRE-TREATMENT WITH 5-FLUOROURACIL, IMIQUIMOD AND CALCIPOTRIOL. AN EXPERIMENTAL HAIRLESS MOUSE STUDY <i>Christiane Bay★, Katrine Togsverd-Bo, Catharina M. Lerche, Merete Haedersdal</i> Bispebjerg Hospital, Copenhagen, Denmark
3:11 PM – 3:21 PM	7	HIGH-FLUENCE LIGHT EMITTING DIODE-GENERATED RED LIGHT INHIBITS KERATINOCYTE PROLIFERATION AND INCREASES REACTIVE OXYGEN SPECIES GENERATION <i>Eugene Koo★→, Ekaterina Kraeva, Andrew Mamalis, Jared Jagdeo</i> University of California Davis, Sacramento, CA
3:22 PM -3:32 PM	8	HISTOLOGIC CHANGES ASSOCIATED WITH TALAPORFIN MEDIATED PHOTODYNAMIC THERAPY IN RAT SKIN <i>Wesley Moy★→, Sebastien De Feraudy, Jonathan Yao, Sean White, Jocelynda Salvador, Kristen Kelly, Bernard Choi</i> University of California, Irvine, CA
3:33 PM – 3:43 PM	9	ERYTHROCYTE-DERIVED OPTICAL NANO-CONSTRUCTS FOR NEAR INFRARED FLUORESCENCE IMAGING OF CANCER BIOMARKERS <i>Jenny Mac★→, Vicente Nunez, Baharak Bahmani, Yadir Guerrero, Valentine Vullev, Bahman Anvari</i> University of California, Riverside, CA
3:44 PM – 3:54 PM	10	LABEL-FREE AND HIGH-THROUGHPUT SENSING OF GLYCATED HEMOGLOBIN FOR POINT-OF-CARE SETTING <i>Rishikesh Pandey★→, Nicolas Spegazzini, Ishan Barman, Gary Horowitz, Niyom Lue, Luis Galindo, Ramachandra Rao Dasari</i> Massachusetts Institute of Technology, Cambridge, MA; Johns Hopkins University, Baltimore, MD; Harvard Medical School, Boston, MA
3:55 PM – 4:05 PM	11	DRUG DELIVERY ASSESSED BY REFLECTANCE CONFOCAL MICROSCOPY: COMPARING ABLATIVE FRACTIONAL LASER vs MICRONEEDLE CHANNELS <i>Daniel Thaysen-Petersen★→, Mette Mogensen, Uffe H. Olesen, Merete Haedersdal</i> Bispebjerg University Hospital, Copenhagen, Denmark
4:06 PM – 4:30 PM		Q & A



1:00 PM - 4:30 PM | ROOM: HYNES AUDITORIUM

Cutaneous Applications – Abstract Session

Educational Needs This session will explore the use of lasers and energy-based devices to treat a wide spectrum of cutaneous conditions. New devices, new uses of established devices, and controlled studies demonstrating objective evidence of treatment effects will be presented. Discourse surrounding these topics from attendees will be encouraged. Maximizing results and minimizing complications with energy-based devices will be a prime objective of this session.

Participants This session is for all health care practitioners, engineers, scientists, or any interested individuals working with lasers and energy-based devices. All health care personnel will benefit by learning how to maximize results of treatment of cutaneous conditions while minimizing complications.

Background Requirements Participants with a basic understanding of skin biology and physics will derive maximal benefit from the presentations, however, all meeting attendees are welcome to attend and contribute.

Instructional Content/Expected Learning Outcomes Attendees will learn about what's new in the field of lasers and energy-based devices. Presentations of new devices and new uses for established devices will provide attendees with data to incorporate into practice or research.

“Hot Topics”

- » Picosecond Era: Picosecond Lasers for Tattoos, Pigmentation, and Skin Rejuvenation.
- » New Devices and Novel Data for Body Contouring.
- » Advances in Fractional Devices.

Chairs Emil A. Tanghetti, MD; Nazanin A. Saedi, MD; Thomas E. Rohrer, MD

Moderators Girish S. Munavalli, MD, MHS; Andrei Metelitsa, MD, FRCPC, FAAD

Speaker Christine Dierickx, MD

Picosecond

TIME	ABSTR	ACTIVITY
1:00 PM – 1:06 PM	LB4	NOVEL METHOD FOR TREATMENT OF MELASMA WITH A 532nm PICOSECOND LASER <i>David Friedman</i> ★ Dr. David Friedman Skin & Laser Center, Jerusalem, Israel
1:07 PM – 1:13 PM	37	A 1064nm, 532nm, AND 755nm LASER SYSTEM FOR THE TREATMENT OF UNWANTED TATTOOS <i>Bradley Bloom</i> ★, <i>Hamad Alabdulrazzaq</i> , <i>Yoon-Soo Cindy Bae</i> , <i>Jeremy Brauer</i> , <i>Julia Neckman</i> , <i>Leonard Bernstein</i> , <i>Elliot Weiss</i> , <i>Robert Anolik</i> , <i>Roy Geronemus</i> Laser & Skin Surgery Center of New York, New York, NY
1:14 PM – 1:20 PM	38A/B	COMPARISON STUDY OF A 532/1064nm PICOSECOND LASER vs A 532/1064nm NANOSECOND LASER IN THE TREATMENT OF MULTI-COLORED TATTOOS IN ASIANS and COMPARISON STUDY OF A 532/1064nm PICOSECOND LASER vs A 532/1064nm NANOSECOND LASER IN THE TREATMENT OF BLACK TATTOOS IN ASIANS <i>Taro Kono</i> ★, <i>Samantha Shek</i> , <i>Henry Chan</i> , <i>William Groff</i> , <i>Kotaro Imagawa</i> , <i>Muneo Miyasaka</i> Tokai University, Isehara, Japan; University of Hong Kong, Hong Kong, China; Wellman Center for Photomedicine, Massachusetts General Hospital, Boston, MA; Cosmetic Laser Dermatology, San Diego, CA
1:21 PM – 1:27 PM	39	A SINGLE CENTER COHORT STUDY FOR REMOVAL OF TATTOOS AND PIGMENTED LESIONS USING A 1064/532nm DUAL WAVELENGTH PICOSECOND LASER <i>Thomas Proebstle</i> ★ University Medical Center Mainz, Mainz, Germany

TIME	ABSTR	ACTIVITY
1:28 PM – 1:34 PM	40	COMPARISON STUDY OF A 532nm PICOSECOND LASER vs A 532nm NANOSECOND LASER IN THE TREATMENT OF PIGMENTED LESIONS IN ASIANS <i>Taro Kono★, Samantha Shek, Henry Chan, William Groff, Kotaro Imagawa, Muneo Miyasaka</i> Tokai University, Isehara, Japan; University of Hong Kong, Hong Kong, China; Wellman Center for Photomedicine, Massachusetts General Hospital, Boston, MA; Cosmetic Laser Dermatology, San Diego, CA
1:35 PM – 1:41 PM	41	UNWANTED PERIORBITAL TATTOOS SAFELY AND EFFECTIVELY TREATED WITH PICOSECOND 755nm ALEXANDRITE LASER <i>Julia Neckman★, Jeremy Brauer, Roy Geronemus</i> Laser & Skin Surgery Center of New York, New York, NY
1:42 PM – 1:48 PM	42	SAFETY AND EFFICACY OF PICOSECOND ALEXANDRITE LASER ON THE TREATMENT OF MIXED MELASMA ON ASIAN PATIENTS <i>Victoria Belo★, Johanna Cristina Munoz, Jennifer Roslyn Sison-De Leon</i> Belo Medical Group, San Juan City, Philippines, Makati City, Philippines
1:49 PM – 1:55 PM	36	DUAL WAVELENGTH PICOSECOND LASER TATTOO REMOVAL: A BLINDED MULTI-CENTER STUDY <i>Tina Alster★, Arielle Kauvar, Eric Bernstein</i> Washington Institute of Dermatologic Laser Surgery, Washington, DC; New York Laser and Skin Care, New York, NY; Main Line Center for Laser Surgery, Ardmore, PA
1:56 PM – 2:02 PM	LB5	A PROSPECTIVE MULTI-CENTER STUDY OF A DUAL-WAVELENGTH LASER PICOSECOND FOR THE TREATMENT OF MELASMA AND LENTIGINES IN ASIAN SKIN <i>Kei Negishi★, Samantha Y.N. Shek, Shiho Tanaka, Chi K. Yeung, Henry H.L. Chan</i> Aoyama Institute of Women's Medicine, Women's Medical University, Tokyo, Japan; Wellman Center for Photomedicine, Massachusetts General Hospital, Boston, MA; The University of Hong Kong, Hong Kong, China
2:03 PM – 2:15 PM		Q & A
2:16 PM – 2:59 PM		BREAK – View ePosters and Visit the Exhibit Hall
3:00 PM – 3:06 PM	43	755nm PICOSECOND LASER FOR SKIN REJUVENATION IN CHINESE <i>Samantha Y.N. Shek★, Chi K. Yeung, Johnny C.Y. Chan, Henry H.L. Chan</i> The University of Hong Kong, Hong Kong, China; Wellman Center for Photomedicine, Massachusetts General Hospital, Boston, MA
3:07 PM – 3:13 PM	44	PICOSECOND LASER FOR FACIAL REJUVENATION USING A COMPRESSED TREATMENT INTERVAL <i>Jeffrey Dover, Kenneth Arndt, Shilpi Khetarpal★, Heidi Prather, Shraddha Desai, Laura Kruter, Joaquina Depina, Kathleen Petrell</i> SkinCare Physicians, Chestnut Hill, MA
3:14 PM – 3:20 PM	45	TREATMENT OF NECK LAXITY USING A PICOSECOND 755nm ALEXANDRITE LASER <i>Anne Zhuang★, Suzanne Kilmer</i> University of California Davis; The Laser and Skin Surgery Center of Northern California, Sacramento, CA
3:21 PM – 3:27 PM	46	PILOT STUDY OF 755nm ALEXANDRITE PICOSECOND LASER FOR THE TREATMENT OF STRIAE DISTENSAE: A CLINICAL AND HISTOPATHOLOGICAL STUDY IN ASIAN PATIENTS <i>Victoria Belo★, Guada Santos-Capiz, Michelle Villaneuva</i> Belo Medical Group, San Juan City, Philippines
3:28 PM – 3:34 PM	47	THE IMMEDIATE CLINICAL AND THERMAL FINDINGS ASSOCIATED WITH THE USE OF A PICOSECOND ALEXANDRITE LASER WITH A FLAT AND A FRACTIONAL OPTIC <i>Emil Tanghetti★, Amanda Knox, Carolyn Hamann</i> Center for Dermatology and Laser Surgery, Sacramento, CA
3:35 PM – 3:41 PM	LB6	COMPARATIVE CUTANEOUS HISTOLOGY FROM THE TREATMENT USING A PICOSECOND ALEXANDRITE AND Nd:YAG LASER WITH A FRACTIONAL OPTICS <i>Emil Tanghetti★</i> Center for Dermatology and Laser Surgery, Sacramento, CA
3:42 PM – 3:48 PM	LB7	HISTOLOGIC EVALUATION OF <i>IN VIVO</i> HUMAN SKIN FOLLOWING FRACTIONATED TREATMENT WITH HIGH INTENSITY 1064 AND 532nm PICOSECOND PULSES <i>Arielle Kauvar★, Kevin Schomaker, Tuvia Dror-Kutcher, Jayant Bahwalkar, Ruthie Amir</i> New York Laser & Skin Care, NY; Syneron Candela, Yokneam, Israel

TIME	ABSTR	ACTIVITY
3:49 PM – 3:55 PM	LB8	A PROSPECTIVE SPLIT-FACE STUDY OF THE PICOSECOND ALEXANDRITE LASER WITH SPECIALIZED LENS ARRAY FOR FACIAL PHOTOAGING IN CHINESE <i>Tong Lin</i> ★, <i>Yiping Ge</i> , <i>Lifang Guo</i> , <i>Rong Zeng</i> Department of Cosmetic Laser Surgery, Institute of Dermatology, Chinese Academy of Medical Sciences, Nanjing, China
3:56 PM – 4:02 PM		Q & A
4:03 PM – 4:09 PM	48	INTERESTING VARIETY OF CLINICAL OBSERVATIONS WITH PICOSECOND LASER TECHNOLOGY <i>Christine Dierickx</i> ★ Skinperium, Boom, Belgium
4:10 PM – 4:30 PM		<u>LEON GOLDMAN MEMORIAL AWARD RECIPIENT</u> Magic Bullets - <i>Christine Dierickx</i>

Photobiomodulation – Abstract Session

Educational Needs The purpose of this session is to present and discuss the latest findings on basic mechanisms of photobiomodulation, pre-clinical and clinical investigations on the critical parameters, mechanism, and effectiveness of light as a therapy for a broad range of clinical applications. Light and its photonic effects and photo-medicine in general have gained recognition as an area of innovative and novel research with significant clinical implications.

Participants Scientists, engineers, medical practitioners, individuals in industry and other health care professionals involved in biomedical applications of light are invited to participate in these sessions.

Background Requirements Participants should have an understanding of light interaction with biological tissues and basic and clinical research.

Instructional Content/Expected Learning Outcomes This session will provide the latest data on basic science and clinical application of light in a wide spectrum of applications. The participants will increase their knowledge in this area and hopefully be stimulated to formulate new ideas to identify the mechanisms involved and the critical parameters needed for successful clinical application of light.

“Hot Topics”

- » Photobiomodulation therapy as a treatment for lung diseases characterized by oxidative stress and inflammation.
- » Photobiomodulation: a promising therapy for chronic low back and pain due to tooth extraction.
- » Clinical evidence for the use of photobiomodulation therapy for inflammatory skin disorders such as rosacea, psoriasis and eczema.

Chairs Juanita J. Anders, PhD; Praveen Arany, DDS, PhD

Moderator Vanessa Holanda, MD

TIME	ABSTR	ACTIVITY
1:00 PM – 1:10 PM	163	PHOTOPROTECTION BY PHOTOBIMODULATION: ANTI-APOPTOTIC EFFECTS PLAY A KEY ROLE <i>Daniel Barolet</i> ★, <i>Gregory Cormack</i> Montreal, Quebec, Canada; Laval, Quebec, Canada
1:11 PM – 1:14 PM		Discussion
1:15 PM – 1:25 PM	164	THE USE OF SHORT PULSE DURATION 585nm PULSE DYE LASER TO CAUSE A BIOSTIMULATORY RESPONSE IN THE TREATMENT OF INFLAMMATORY SKIN DISORDERS <i>Stephen Eubanks</i> ★ Denver, CO
1:26 PM – 1:29 PM		Discussion
1:30 PM – 1:40 PM	165	HIGH-FLUENCE LIGHT EMITTING DIODE-GENERATED RED LIGHT INCREASES REACTIVE OXYGEN SPECIES AND INHIBITS COLLAGEN PRODUCTION IN HUMAN SKIN FIBROBLASTS <i>Andrew Mamalis</i> ★→, <i>Eugene Koo</i> , <i>Jared Jagdeo</i> University of California Davis, Sacramento, CA
1:41 PM – 1:44 PM		Discussion
1:45 PM – 1:55 PM	166	OSTEOCLASTOGENIC ACTIVITY OF TUMOR CELLS AFTER LASER THERAPY <i>Kaline Brito Sousa</i> ★, <i>Tatiana Schalch</i> , <i>Maria Helena Fernandes</i> , <i>João Costa Rodrigues</i> , <i>Mônica Garcia</i> , <i>Raquel Mesquita Ferrari</i> , <i>Sandra Bussadori</i> , <i>Kristianne Fernandes</i> Nove de Julho University, São Paulo, Brazil; Laboratory for Bone Metabolism and Regeneration Faculdade de Medicina Dentária, Universidade do Porto, Porto, Portugal
1:56 PM – 1:59 PM		Discussion

TIME	ABSTR	ACTIVITY
2:00 PM – 2:10 PM	167	PHOTOBIMODULATION INDUCED BY 630nm RED LIGHT ATTENUATES HIGH GLUCOSE-INDUCED C2C12 MYOBLAST APOPTOSIS THROUGH ACTIVATION OF PI3K-AKT SIGNALING AND INHIBITION OF C-JUN N-TERMINAL KINASE PATHWAY <i>Fang-hui Li</i> ★ School of Physical Education and Health, Zhaoqing University, Zhaoqing, China
2:11 PM – 2:14 PM		Discussion
2:15 PM – 2:59 PM		BREAK – View ePosters and Visit the Exhibit Hall
3:00 PM – 3:10 PM	168	TREATMENT OF POST-SURGICAL NEURITIS WITH PHOTOBIMODULATION: A CASE REPORT <i>Richard Hall, Thomas Mang</i> ★ University at Buffalo, Buffalo, NY
3:11 PM – 3:14 PM		Discussion
3:15 PM – 3:25 PM	169	THE MECHANISTIC BASIS OF NEUROMODULATION OF LOW BACK PAIN BY NEAR INFRARED LIGHT <i>Vanessa Holanda</i> ★→, <i>Maria Crisitina Chavantes, Xingjia Wu, Juanita Anders</i> Nove de Julho University, São Paulo, Brazil; Uniformed Service University of Health Science, Bethesda, MD
3:26 PM – 3:29 PM		Discussion
3:30 PM – 3:40 PM	LB36	<u>KERITH FOUNDATION BEST OF PHOTOBIMODULATION ABSTRACT SESSION AWARD RECIPIENT</u> THE INVOLVEMENT OF ATP SYNTHESIS IN CELLULAR PROTECTION CAUSED BY PHOTOBIMODULATION IN C2C12 CELLS EXPOSED TO SNAKE VENOM <i>Stella Zamuner</i> ★, <i>Camila Silva, Luciana Miato Goncalves-Silva</i> Uninove, São Paulo, Brazil
3:41 PM – 3:44 PM		Discussion
3:45 PM – 3:55 PM	LB37	LASER THERAPY FOR CHRONIC INDURATION PENIS PLASTICA (IPP): 33 YEARS OF EXPERIENCE, RESULTS AND FOLLOW-UP <i>Leonardo Longo</i> ★, <i>Olha Sheykh, Diego Longo, Giulio Cherubini</i> Institute Laser Medicine, Firenze, Italy
3:56 PM – 4:00 PM		Discussion

Tech Connect – Non-CME Special Session

Educational Needs 1) Novice practitioners just introducing or having minimal experience using light energy, radiofrequency, ultrasound and/or cryolipolysis devices and/or more experienced practitioners who are interested in expanding their practice to new applications using alternative devices. 2) Experienced (expert) practitioners interested in the comparison and contrasting of devices and procedural approaches used by other experts.

Participants No specific participant details.

Background Requirements No specific background requirements.

Instructional Content/Expected Learning Outcomes As a result of expert panel members sharing their perspectives regarding specific technologies and procedural approaches, participants will be able to:

- 1) Learn about a broad spectrum of devices that can be considered for use in clinical practice.
- 2) Gain introduction to the use of specific devices for specific clinical procedures.
- 3) Compare and contrast specific devices for specific procedures.
- 4) Understand the benefits and disadvantages of using specific devices for specific procedures.
- 5) Determine which device(s) to purchase for use in their clinical practice.
- 6) Understand the limitations of devices which they currently use in their practice.
- 7) Interpret and understand information provided by companies which vend devices and services.
- 8) Compare and contrast features/benefits of technology so participants better understand the nuances of systems and how this plays out in clinical practice.

Directors Christopher B. Zachary, MBBS, FRCP; Roy G. Geronemus, MD

Session Moderator Robert A. Weiss, MD

Faculty Mathew M. Avram, MD, JD; Robert A. Weiss, MD; Jason D. Pozner, MD; Suzanne L. Kilmer, MD; Brian M. Kinney, MD, MSME, FACS; Michael S. Kaminer, MD; Barry DiBernardo, MD; Mitchel P. Goldman, MD; Yoon-Soo Cindy Bae, MD; Paul M. Friedman, MD; Andrew C. Krakowski, MD, FAAD; Nazanin A. Saedi, MD, PhD; Jeremy A. Brauer, MD; E. Victor Ross, MD, Henry H.L. Chan, MD, PhD, FRCP

TIME	ACTIVITY
4:45 PM – 5:14 PM	NON-INVASIVE BODY CONTOURING
	<i>Mathew M. Avram</i>
	<i>Robert A. Weiss</i>
	<i>Jason N. Pozner</i>
5:15 PM – 5:44 PM	NECK TIGHTENING AND FAT REDUCTION
	<i>Suzanne L. Kilmer</i>
	<i>Brian M. Kinney</i>
	<i>Michael S. Kaminer</i>
5:45 PM – 6:14 PM	CELLULITE DEVICES
	<i>Barry DiBernardo</i>
	<i>Mitchel P. Goldman</i>
	<i>Yoon-Soo Cindy Bae</i>
6:15 PM – 6:44 PM	VASCULAR TREATMENT:
	<i>Paul M. Friedman</i>
	<i>Andrew C. Krakowski</i>
	<i>Nazanin A. Saedi</i>
6:45 PM – 7:15 PM	PIGMENTED LESIONS AND TATTOOS
	<i>Jeremy A. Brauer</i>
	<i>E. Victor Ross</i>
	<i>Henry H.L. Chan</i>



7:30 PM - 9:30 PM | ROOM: REPUBLIC BALLROOM

Celebration of ASLMS Women in Energy-Based Devices

Director Juanita J. Anders, PhD

Leadership, Mentorship & Public Advocacy for Women in Medical Science Award

- **Award Presenter** Tina S. Alster, MD
- **Award Recipient** Victoria Reggie Kennedy

Panel Directors

- **Industry Panel** Wendy Frydrych, PhD; Davitt Sheetal
- **International Women's Health Panel** Macrene Alexiades, MD, PhD

Panel Speakers

- **Industry Panel** *Vlad Paul Blanc, Jhung Won Vojir, PhD; Marina Kamenakis, Gloria Janata, Kalia Mendel, Constance Wittig*
- **International Women's Health Panel** *M. Cristina Chavantes, MD, PhD; Renatta Belotto, MD; Urska B. Ogrinc, MD, MSc; Miriam Greene, MD; Margaret A. Weiss, MD*

Panel Session

TIME	ACTIVITY
7:30 PM – 7:35 PM	Welcome and Introduction – <i>Juanita J. Anders</i>
7:36 PM – 7:45 PM	Award Presentation – <i>Tina S. Alster</i> Leadership, Mentorship & Public Advocacy for Women in Medical Science Award <ul style="list-style-type: none"> • Recipient – <i>Victoria Reggie Kennedy</i> • Talk Title – <i>To be determined</i>
7:46 PM – 8:15 PM	Industry Panel <ul style="list-style-type: none"> • Directors – <i>Wendy Frydrych, Davitt Sheetal</i> • Panelists – <i>Vlad Paul Blanc, Jhung Won Vojir, Marina Kamenakis, Gloria Janata, Kalia Mendel, Constance Wittig</i>
8:16 PM – 8:45 PM	International Women's Health Panel <ul style="list-style-type: none"> • Director – <i>Macrene Alexiades</i> • Panelists – <i>M. Cristina Chavantes, Renatta Belotto, Urska B. Ogrinc, Miriam Greene, Margaret A. Weiss</i>

Roundtable Session

TIME	ACTIVITY
8:46 PM – 8:50 PM	Introduction to Roundtable Session – <i>Juanita J. Anders</i>
8:50 PM – 9:30 PM <i>* Hors d'oeuvres and refreshments will be available during the roundtable session.</i>	Roundtables: <ul style="list-style-type: none"> • Aesthetics – <i>Arisa Ortiz MD; Tina Alster, MD</i> • Basic Science – <i>To be determined</i> • Dermatology – <i>Kristen Kelly, MD; Than-Nga Tran, MD, PhD</i> • Gynecology – <i>Macrene Alexiades, MD, PhD; Urska B. Ogrinc, MD, MSc</i> • Industry Representatives – <i>Wendy Frydrych, PhD; Davitt Sheetal</i> • Nursing/Allied Health – <i>Patti Owens, RN, MHA, CMLSO, CNOR; Mary Stoll, RN</i> • Photobiomodulation – <i>M. Cristina Chavantes, MD, PhD; Jeri-Annette Lyons, PhD</i> • Plastic Surgery – <i>Diane Duncan, MD; Julie Woodward, MD</i>

7:00 AM - 9:00 AM | ROOM: CONSTITUTION BALLROOM B

AMA PRA CATEGORY 1.00 CME CREDITS: 2.00 MAX | CE CONTACT HOURS: 2.00 MAX
ACCME accreditation statement regarding CMEs and CEUs available online

Basic Mechanisms of Photobiomodulation - Workshop

Educational Needs The use of “low level” light applications termed photobiomodulation is an expanding field with a broad range of applications in medicine, rehabilitation, dentistry and veterinary medicine. To appreciate how light can have therapeutic effects on many tissues and organs it is essential to understand the molecular mechanisms involved. Experts will focus on the basics of light transmission through tissues and absorption by cytochromes in cells and tissues, and the role of signaling molecules, biological responses of cells and tissues to photons, and mechanistic convergence of photobiomodulation and clinical effects. Clinical and preclinical applications, including recent work on traumatic brain injury and muscular performance will be discussed.

Participants Scientists, engineers, health care professionals, and industrial representatives interested in low level light applications and science.

Background Requirements Any scientist or health care provider working with energy-based devices would benefit from understanding these basic light-biological interactions and how these processes may be occurring in many currently used energy-based clinical modalities.

Instructional Content/Expected Learning Outcomes At the conclusion of this workshop, participants will: understand the photobiological basis for light absorption by chromophores, be aware of specific wavelengths absorbed by different chromophores, gain knowledge of the depth of penetration of various wavelengths of light, be aware of the current proof for the mechanistic basis of photobiomodulation by understanding the role of different signaling molecules, appreciate the breadth of biological responses of cells and tissues after light treatments, and understand how all this mechanistic proof translates to a clinical efficacy.

Director Raymond J. Lanzafame, MD, MBA, FACS

Faculty Juanita J. Anders, PhD; David Baxter, TD, DPhil, MBA; Margaret A. Naeser, PhD

TIME	ACTIVITY
7:00 AM – 7:05 AM	Introduction and Pre-Test – <i>Raymond J. Lanzafame</i>
7:06 AM – 7:26 AM	Biological Chromophores, Action Spectra vs Absorption Spectra, Wavelength and Target Tissue and Signaling Molecules in Photobiomodulation – <i>Juanita J. Anders</i>
7:27 AM – 7:32 AM	Q&A
7:33 AM – 7:53 AM	The Role of Photobiomodulation in Management of Musculoskeletal Injury and Pain – <i>David Baxter</i>
7:54 AM – 7:59 AM	Q&A
8:00 AM – 8:20 AM	Biological Responses to Photobiomodulation in Traumatic Brain Injury and Neurological Disorders – <i>Margaret A. Naeser</i>
8:21 AM – 8:26 AM	Q&A
8:27 AM – 8:50 AM	Photobiomodulation and Clinical Effects: A Convergence of Mechanisms – <i>Raymond J. Lanzafame</i>
8:51 AM – 9:00 AM	Conclusion, Q&A, Post-Test – <i>Raymond J. Lanzafame</i>

7:00 AM - 9:00 AM | ROOM: BACK BAY BALLROOM C & D

AMA PRA CATEGORY 1.00 CME CREDITS: 2.00 MAX | CE CONTACT HOURS: 2.00 MAX
ACCME accreditation statement regarding CMEs and CEUs available online

Laser Assisted Drug Delivery - Workshop

Educational Needs

- 1) Understand the interaction between fractional lasers and topically applied drugs, providing attendees with a basic understanding of the interaction between laser settings and clinical skin reactions.
- 2) Evaluate the current clinical state of knowledge in laser-assisted drug delivery in dermatology oncology, scar treatment, and rejuvenation procedures.
- 3) Review safety issues.
- 4) Gain updated information on the latest research and future of fractional laser procedures and in combination with topical drugs and substances.

Participants This activity is primarily designed for clinical laser practitioners and surgeons in fields such as dermatology and plastic surgery.

Background Requirements Participants should possess basic clinical laser skills and training.

Instructional Content/Expected Learning Outcomes This activity is directed at both potential and experienced users of fractional laser technologies to enhance the uptake of topically applied drugs. The goal of this activity will be to share knowledge of laser-assisted drug delivery and to provide clinical tips to help in your office. We will have a comprehensive session including basic knowledge, clinical update and future perspectives on the combination of fractional lasers and drugs. We will have top experts in aesthetic, academic and private practice come together in a multidisciplinary panel to address this important topic. We will focus on laser parameters and indications to help optimize patient treatment in your office. The activity will end with an enlightening talk on research and the future of scar treatment with laser therapy.

Directors Merete Haedersdal, MD, PhD, DMSc; Andrés Mar Erlendsson, MD, PhD

Faculty Jill S. Waibel, MD; Jeffrey S. Dover, MD, FRCPD; Uwe Paasch, MD, PhD

TIME	ACTIVITY
7:00 AM - 7:05 AM	Introduction and Pre-Test – <i>Merete Haedersdal, Andrés Mar Erlendsson</i>
7:06 AM - 7:26 AM	An Overview of Laser-Assisted Drug Delivery – <i>Andrés Mar Erlendsson</i>
7:27 AM - 7:47 AM	Current Advancements in the Treatment of Scars – How We Do It – <i>Jill S. Waibel</i>
7:48 AM - 8:08 AM	Combo of Fractional Lasers and Drugs for Rejuvenation – <i>Jeffrey S. Dover</i>
8:09 AM - 8:29 AM	Skin Cancer Treated with Fractional Lasers and Anti-Cancer Drugs – <i>Merete Haedersdal</i>
8:30 AM - 8:50 AM	Outlook, Safety and Future Perspectives – <i>Uwe Paasch</i>
8:51 AM - 9:00 AM	Conclusion, Q&A, Post-Test – <i>Merete Haedersdal, Andrés Mar Erlendsson</i>

7:00 AM - 9:00 AM | ROOM: HYNES AUDITORIUM

AMA PRA CATEGORY 1.00 CME CREDITS: 2.00 MAX | CE CONTACT HOURS: 2.00 MAX
ACCME accreditation statement regarding CMEs and CEUs available online

Non-Invasive Body Contouring - Workshop

Educational Needs

- 1) Provide an overview of body contouring devices and how they specifically affect adipocyte viability.
- 2) Discuss specific devices in detail with a review of the literature and personal experience.
- 3) Discuss ways to enhance results by combining technologies.

Participants All physicians practicing surgical or non-surgical body contouring in their offices.

Background Requirements Participants should have knowledge of anatomy of the fat compartments of the trunk, extremities and face. Participants must also have familiarity of current classification for body contouring devices.

Instructional Content/Expected Learning Outcomes It is expected that participants will be able to more critically judge the results from body contouring devices as well as better understand the mechanism of action on fat cells.

Directors Robert A. Weiss, MD; Girish S. Munavalli, MD, MHS

Faculty Daniel P. Friedmann, MD; W. Patrick Coleman, MD; Bruce E. Katz, MD; Diane Duncan, MD; David H. McDaniel, MD

TIME	ACTIVITY
7:00 AM – 7:09 AM	Introduction and Pre-Test – <i>Robert A. Weiss</i>
7:10 AM – 7:20 AM	Overview of Body Contouring and Mechanism of Action on Adipocytes – <i>Daniel P. Friedmann</i>
7:21 AM – 7:35 AM	Cryolipolysis: Update and New Indications – <i>Girish S. Munavalli</i>
7:36 AM – 7:50 AM	Focused Ultrasound – <i>W. Patrick Coleman</i>
7:51 AM – 8:05 AM	Non-Invasive Laser – <i>Bruce E. Katz</i>
8:06 AM – 8:25 AM	RF Devices for Body Contouring – <i>Robert A. Weiss</i>
8:26 AM – 8:35 AM	Understanding Adipolysis at the Cellular Level - Compare and Contrasting Different Methods Using SEM and Histology in Correlation with Clinical Results – <i>Diane Duncan</i>
8:36 AM – 8:45 AM	Photobiomodulation (low level light) – <i>David H. McDaniel</i>
8:46 AM – 9:00 AM	Conclusions, Q&A, Post-Test – <i>Robert A. Weiss</i>

7:00 AM - 9:00 AM | ROOM: BACK BAY BALLROOM A & B

AMA PRA CATEGORY 1.00 CME CREDITS: 2.00 MAX | CE CONTACT HOURS: 2.00 MAX
ACCME accreditation statement regarding CMEs and CEUs available online

Periorbital Therapies and Rejuvenation - Workshop

Educational Needs This course will provide attendees with information on basic periorbital anatomy and patient evaluation techniques. The attendees will be educated on complications resulting from treatments to this area and how to manage these post-procedure complications and prevent them from happening. They will also learn about new techniques for periorbital rejuvenation and pearls for common laser, non-laser devices and injectable treatments. Finally, course attendees will have an improved ability to evaluate and educate patients in periorbital rejuvenation options.

Participants The target audience can be any physician, physician assistant, nurse or other physician extender who may be interested in learning how to improve signs of periorbital aging with rejuvenation techniques.

Background Requirements A background knowledge of periocular aesthetics and basic laser and injectables techniques are helpful.

Instructional Content/Expected Learning Outcomes

- 1) Knowledge of periocular anatomy and patient evaluation.
- 2) Improved knowledge of laser treatments (ablative and non-ablative), as well as new technologies, for periocular use and rejuvenation.
- 3) Knowledge and understanding of using neuromodulators in the peri-ocular area.
- 4) Knowledge and understanding, as well as new techniques, of using injectable facial fillers in the periocular area.
- 5) Understanding of post-procedure complications from peri-orbital treatments and how to manage and prevent these complications.

Directors Jason D. Bloom, MD; Brian S. Biesman, MD, FACS

Faculty Joseph A. Eviatar, MD, FACS; Joel L. Cohen, MD; Jason N. Pozner, MD

TIME	ACTIVITY
7:00 AM – 7:09 AM	Introduction and Pre-Test – <i>Jason D. Bloom, Brian S. Biesman</i>
7:10 AM – 7:25 AM	Periorbital Anatomy & Patient Considerations for Aesthetic Procedures – <i>Jason D. Bloom</i>
7:26 AM – 7:41 AM	The Role of Soft Tissue Fillers in Periorbital Rejuvenation – <i>Joseph A. Eviatar</i>
7:42 AM – 7:57 AM	Periocular Neuromodulators – <i>Joel L. Cohen</i>
7:58 AM – 8:13 AM	Periorbital Laser Resurfacing & Energy-Based Treatments – <i>Brian S. Biesman</i>
8:14 AM – 8:29 AM	Management of Periocular Complications from Aesthetic Procedures – <i>Jason N. Pozner</i>
8:30 AM – 9:00 AM	Conclusion, Q&A, Post-Test – <i>Jason D. Bloom, Brian S. Biesman</i>

8:00 AM – 12:00 PM | ROOM: HYNES 108

ASLMS/HNODIS – Abstract Session

Optical Diagnostics I

Educational Needs Optical diagnostic methods make use of light to show tissue changes of different origin. This session will review current preclinical and clinical developments in the field of optical diagnostic methods for oncological and non-oncological indications in the upper aerodigestive tract.

Participants Designed for clinicians, scientists, students and members of industry.

Background Requirements No special background required for attendance

Instructional Content/Expected Learning Outcomes The current state of the art for optical diagnostic methods in the upper aerodigestive tract will be examined. A clinically oriented overview of existing methods and possible future developments will be highlighted. It is expected that participants in these activities will identify gaps in their knowledge, competence or performance.

“Hot Topics”

- » State of the Art in head and neck optical diagnostics will be detailed.
- » New applications for optical coherence tomography in the head and neck area will be examined.
- » New methods such as dynamic optical contrast imaging will be presented and discussed.
- » A future outlook will be provided.

Chair Christian S. Betz, MD, PhD

Speaker *To be determined.*

TIME	ABSTR	ACTIVITY
8:00 AM – 8:05 AM		INTRODUCTION – <i>Christian S. Betz</i>
8:06 AM – 8:35 AM	112	FUTURE DIRECTIONS FOR OPTICAL DIAGNOSIS IN THE UPPER AERODIGESTIVE TRACT <i>Christian Betz★, Maria Schuster, Christian Pfeffer, Adrian Rühm, Herbert Stepp, Anna Englhard, Veronika Volgger</i> Klinikum der Universität, München; Laser-Research Laboratory at the LIFE Center, Munich, Germany
8:36 AM – 8:50 AM	113	FUTURE OF OPTICAL BIOPSY IN DIAGNOSIS OF ORAL SQUAMOUS CELL CARCINOMA (OSCC): A REVIEW AND META-ANALYSIS OF RELEVANT PUBLISHED STUDIES <i>Essam Al-Omar★</i> Taibah University, Tayba, Saudia Arabia
8:51 AM – 9:05 AM	114	INTRAOPERATIVE OPTICAL COHERENCE TOMOGRAPHY OF PEDIATRIC VOCAL FOLD LESIONS <i>Fouzi Benboujja★, Jordan Garcia, Kathy Beaudette, Mathias Strupler, Christopher Hartnick, Caroline Boudoux</i> Polytechnique, Montreal, Quebec, Canada; Harvard Medical School, Boston, MA
9:06 AM – 9:20 AM	115	INTRAOPERATIVE ASSESSMENT OF LARYNGEAL PATHOLOGIES WITH OPTICAL COHERENCE TOMOGRAPHY (OCT) INTEGRATED INTO A SURGICAL MICROSCOPE <i>Tom Betz★→, Anna S. Englhard, Veronika Volgger, Christian S. Betz</i> Ludwig Maximilian University, Munich, Germany
9:21 AM – 9:35 AM	116	OPTICAL COHERENCE TOMOGRAPHY AS A TOOL FOR RAPID NECK TISSUE IDENTIFICATION DURING THYROID SURGERY <i>Etienne De Montigny★, Anastasios Maniakas, Wendy-Julie Madore, Olguta-Ecaterina Gologan, Tareck Ayad, Caroline Boudoux</i> Polytechnique; Montreal University Health Centre, Montreal, Quebec, Canada
9:36 AM – 9:45 AM		Q & A
9:46 AM – 10:30 AM		BREAK – View ePosters and Visit the Exhibit Hall
10:31 AM – 10:45 AM	LB28	THE DIAGNOSIS OF CUTANEOUS LESIONS OF THE HEAD AND NECK USING OPTICAL COHERENCE TOMOGRAPHY <i>Waseem Jerjes★, Zaid Hamdoon, Gordon McKenzie, Colin Hopper</i> University College London, London, United Kingdom

TIME	ABSTR	ACTIVITY
10:46 AM – 11:00 AM	118	PRELIMINARY RESULTS REGARDING THE COMBINED USE OF NARROW BAND IMAGING AND HIGH-SPEED VIDEO LARYNGOSCOPY TO DISCRIMINATE LARYNGEAL LESIONS <i>Veronika Volgger</i> ★→, <i>Maria E. Schuster</i> , <i>Axelle Felicio</i> , <i>Jörg Lohscheller</i> , <i>Hanan Al-Muzaini</i> , <i>Christian S. Betz</i> ENT-Clinic, Großhadern, Munich, Germany; Hochschule Trier, Fachbereich Informatik, Trier, Germany
11:01 AM – 11:15 AM		Dynamic Optical Contrast Imaging as A Novel Modality to Rapidly Distinguish Head and Neck Squamous Cell Carcinoma from Surrounding Normal Tissue – <i>Speaker to be determined</i>
11:16 AM – 11:30 AM	LB29	EVALUATING IMAGING MARKERS FOR ORAL CANCER SCREENING USING OPTICAL COHERENCE TOMOGRAPHY <i>Anne Tran</i> ★, <i>Tracie Lam</i> , <i>Emon Heidari</i> , <i>Sumsum Sunny</i> , <i>Bonney James</i> , <i>D.R. Ravindra</i> , <i>A.R. Subhashini</i> , <i>G. Keerthi</i> , <i>G. Shubha</i> , <i>K. Uma</i> , <i>Sandeep Kumar</i> , <i>Swathi Mani</i> , <i>Vikram Kekatpure</i> , <i>B.N. Praveen</i> , <i>Amritha Suresh</i> , <i>Moni Abraham Kuriakose</i> , <i>Zhongping Chen</i> , <i>Petra Wilder-Smith</i> Beckman Laser Institute, University of California, Irvine, CA; Integrated Head and Neck Oncology, Mazumdar Shaw Medical Center and Center for Translational Research; KLES Institute of Dental Sciences, Bangalore, India
11:31 AM – 11:45 AM	LB30	ANALYSIS OF TISSUE MECHANICS AFTER ELECTROCHEMICAL THERAPY <i>Christian Barnes</i> ★, <i>Wesley Moy</i> , <i>Erica Su</i> , <i>Brian Wong</i> University of California, Irvine, CA
11:46 AM – 12:00 PM		Q & A



Emerging Energy-Based Device Applications in Gynecology – Special Panel Session

Educational Needs Cover the emerging application of laser and energy-based technologies for the treatment of diseases of the vulvovaginal tract, pelvic prolapse, and urinary incontinence.

Participants This session is targeted towards gynecologists, urologists, urogynecologists, dermatologists, and laser specialists who are incorporating treatment of gynecological disorders in their practice.

Background Requirements Attendees may have a background in urology, gynecology or dermatology of the genital tract or experience with lasers and energy-based devices.

Instructional Content/Expected Learning Outcomes Upon conclusion of this session, attendees will be familiar with the technologies and applications of devices for gynecologic disorders. Attendees will understand the technologic parameters and appropriate indications of fractional carbon dioxide lasers and radiofrequency devices for gynecologic applications.

Directors Macrene R. Alexiades, MD, PhD; Mickey M. Karram, MD

Panelists Red M. Alinsod, MD, FACOG, FACS, ACGE; Cheryl B. Iglesia, MD; Mickey M. Karram, MD; Michael S. Baggish, MD

TIME	ACTIVITY
9:30 AM – 9:35 AM	Introduction – <i>Macrene R. Alexiades, Mickey M. Karram</i>
9:36 AM – 9:43 AM	Energy-Based Solutions to Pelvic Prolapse – <i>Red M. Alinsod</i>
9:44 AM – 9:51 AM	Functional Derangements of the Pelvic Floor – <i>Cheryl B. Iglesia</i>
9:52 AM – 9:59 AM	Vulvovaginal Atrophy – <i>Mickey M. Karram</i>
10:00 AM – 10:07 AM	Lichen Sclerosus – <i>Michael S. Baggish</i>
10:08 AM – 10:15 AM	Conclusion, Q&A - <i>Macrene R. Alexiades, Mickey M. Karram</i>



10:00 AM - 12:00 PM | ROOM: HYNES 107

ASLMS/NAALT – Abstract Session

Veterinary Applications

Educational Needs This session will present current clinical protocols and outcomes of photobiomodulation in veterinary medicine.

Participants This session is designed for veterinary clinicians or other individuals interested in applying veterinary photobiomodulation techniques to human applications or to research.

Background Requirements Participants should have a medical background and some knowledge of tissue interactions with LEDs and lasers as well as the basic parameters of LED and laser devices.

Instructional Content/Expected Learning Outcomes Presentations will cover many body system pathologies and be illustrated by multiple clinical cases. Treatment parameters, application techniques, frequency of treatments and clinical outcomes will be discussed. The participant will develop a good understanding of which diseases respond well to photobiomodulation and in some cases which parameters offer the best success.

“Hot Topics”

- » Chronic Renal Failure Applications.
- » Brachycephalic Respiratory Applications.
- » Laser Assisted Endodontics in Exotic Animals.
- » Common Clinical Applications in Small Animal Practice.
- » Neurological Applications.
- » Surgery Without Cutting.

Chair Richard Godine, DVM

Speaker Ronald Hirschberg, DVM

TIME	ABSTR	ACTIVITY
10:00 AM – 10:25 AM	137	PHOTOBIMODULATION THERAPY IN CANINE AND FELINE PATIENTS WITH CHRONIC RENAL DISEASE: A PILOT STUDY <i>Ronald Hirschberg</i> ★ Brockton, MA
10:26 AM – 10:45 AM	138	TREATMENT OF BRACHIOCEPHALIC AIRWAY SYNDROME IN DOGS WITH COMBINATION OF HARD LASERS AND PHOTODYNAMIC LASER <i>Katalin Kovacs</i> ★ Small Animal Laser Clinic, Budapest, Hungary
10:46 AM – 11:05 AM	139	LASER DENTAL APPLICATION: LASER ASSISTED ENDODONTIC TREATMENTS IN ZOO ANIMALS <i>Katalin Kovacs</i> ★ Small Animal Laser Clinic, Budapest, Hungary
11:06 AM – 11:20 AM	140	USE OF A 980nm DIODE LASER FOR TREATMENT OF VETERINARY PATIENTS: A CLINICAL REVIEW <i>Christopher Winkler</i> ★ Suffolk Veterinary Group Animal Wellness and Laser Surgery Center, Selden, NY
11:21 AM – 11:35 AM		PBM Applications for Central and Peripheral Nerve Diseases in Veterinary Medicine – <i>Richard Godine</i>
11:36 AM – 11:50 AM		PBMT Treatment of Hepatic Lipidosis in a Canine Patient – <i>Ronald Hirschberg</i>
11:51 AM – 12:00 PM		Q & A

10:30 AM - 12:00 PM | ROOM: HYNES AUDITORIUM

Cutting Edge: Laser and Skin Session

Educational Needs Clinicians, health professional representatives, scientists, engineers, and industry representatives need big-picture understanding of the success and limitations of current laser and light-based treatment for challenging medical conditions, and of the cutting-edge research that may someday lead to an improvement in the standard care.

Participants All attendees of the ASLMS Annual Conference.

Background Requirements Attendees are not required to have any prior knowledge of laser medicine or basic science.

Instructional Content/Expected Learning Outcomes Leading clinicians and scientific researchers will discuss state-of-the-art and future care for patients with challenging medical conditions. This knowledge may lead to increased cooperation among conference attendees and new research directions.

Directors J. Stuart Nelson, MD, PhD; R. Rox Anderson, MD

Faculty Nathan S. Uebelhoer, DO; Robert A. Weiss, MD; E. Victor Ross, MD; Dieter Manstein, MD, PhD

Award Speaker Mathew M. Avram, MD, JD

TIME	ACTIVITY
10:30 AM – 10:32 AM	Session Welcome and Introduction – <i>J. Stuart Nelson, R. Rox Anderson</i>
10:33 AM – 10:43 AM	Removing the Absurdity from Tattoo Removal – <i>R. Rox Anderson</i>
10:44 AM – 10:55 AM	ELLET H. DRAKE MEMORIAL AWARD RECIPIENT Pushing Innovation with Energy-Based Treatments in your Daily Practice – <i>Mathew M. Avram</i>
10:56 AM – 11:06 AM	Practical Advances in Scar Treatment – <i>Nathan S. Uebelhoer</i>
11:07 AM – 11:17 AM	Q&A
11:18 AM – 11:28 AM	Do IR Diodes Work on Fat? – <i>Robert A. Weiss</i>
11:29 AM – 11:39 AM	Potential Enhancement of Aesthetic Applications Through the Use of Newer Fiber Laser Technologies – <i>E. Victor Ross</i>
11:40 AM – 11:50 AM	Seeing the Invisible – <i>Dieter Manstein</i>
11:51 AM – 12:00 PM	Conclusion, Q&A, Discussion – <i>J. Stuart Nelson, R. Rox Anderson</i>

1:30 PM - 5:30 PM | ROOM: BACK BAY BALLROOM C & D

Clinical and Career Pearls for Residents, Fellows and Energy-Based Device Novices – Special Session

Educational Needs This activity addresses the need for fundamental knowledge and clinical pearls to increase understanding, competence, and performance with lasers and light-based devices in clinical practice.

Participants This activity is designed for physicians, residents, and fellows that are interested in using lasers and energy-based devices in practice.

Background Requirements This activity requires a medical degree and basic knowledge of laser and energy physics and skin and soft tissue biology.

Instructional Content/Expected Learning Outcomes

- 1) Discuss the basic science of lasers and light energy technologies.
- 2) Understand laser-tissue interactions to achieve desired outcomes.
- 3) Discuss appropriate patient selection, safety procedures, and how to meet patient expectations.
- 4) Understand appropriate clinical applications for lasers and other light based energy devices.
- 5) Be comfortable in the use of lasers for the treatment of aesthetic and therapeutic concerns including hair removal, vascular lesions, skin tightening and rejuvenation, scars, pigmentation, and tattoos.
- 6) Summarize new and emerging technologies for laser surgery and aesthetic skin therapy.
- 7) Avoid complications with lasers and light energy technologies.

Directors Shraddha Desai, MD; Jeffrey T.S. Hsu, MD, FAAD; Suneel Chilukuri, MD, FAAD, FACMS, FASDS, FASLMS

Faculty Melanie Palm, MD, MBA; Kelly J. Stankiewicz, MD, FAAD; Vineet Mishra, MD; H. Amy F. Taub, MD; Deanne Mraz Robinson, MD, FAAD; Bruce E. Katz, MD; Laura Kruter, MD, FAAD; Daniel P. Friedmann, MD

TIME	ACTIVITY
1:30 PM – 1:34 PM	Introduction – <i>Shraddha Desai, Jeffrey T.S. Hsu, Suneel Chilukuri</i>
1:35 PM – 1:50 PM	Laser Biophysics – <i>Shraddha Desai</i>
1:51 PM – 2:06 PM	Updates in Intense Pulsed Light – <i>Melanie Palm</i>
2:07 PM – 2:22 PM	Pigment and Tattoo Lasers – <i>Kelly Stankiewicz</i>
2:23 PM – 2:38 PM	Hair Lasers – <i>Vineet Mishra</i>
2:39 PM – 2:44 PM	Q&A
2:45 PM – 3:29 PM	Break
3:30 PM – 3:47 PM	Vascular Lasers – <i>Vineet Mishra</i>
3:48 PM – 4:03 PM	Ablative and Non-Ablative Resurfacing – <i>Amy F. Taub</i>
4:04 PM – 4:09 PM	Q&A
4:10 PM – 4:45 PM	Lasers and Energy-Based Devices for Body Contouring and Rejuvenation – <i>Deanne Mraz Robinson, Bruce E. Katz</i>
4:46 PM – 4:49 PM	Q&A
4:50 PM – 5:05 PM	Patient Consultations – <i>Laura A. Kruter</i>
5:06 PM – 5:21 PM	Managing Complications – <i>Daniel Friedmann</i>
5:22 PM – 5:30 PM	Conclusion, Q&A – <i>Shraddha Desai, Jeffrey T.S. Hsu, Suneel Chilukuri</i>

1:30 PM - 5:30 PM | ROOM: HYNES 104

ASLMS/PAPDT PDT – Abstract Session

Clinical and Basic Science – PDT Updates and Abstracts

Educational Needs The session will review and highlight the state of the art in clinical and basic science of Photodynamic Therapy.

Participants For this session, participants should include clinicians, scientists, nurses, students and members of industry interested in PDT.

Background Requirements No special background is required.

Instructional Content/Expected Learning Outcomes It is expected that participants in these activities will identify gaps in their knowledge, competence, or performance.

“Hot Topics”

- » The use of PDT in brain tumors and Glioblastoma-innovative therapy that may improve outcomes for this highly aggressive cancer.
- » The new light fabric-allows for simple and reproducible PDT to treat various cancers of skin and body.
- » The use of antimicrobial PDT- as antibiotics become less effective, PDT has become an important option.

Chairs Keith Cengel, MD, PhD; Tayyaba Hasan, PhD

Speakers Merrill A. Biel, MD, PhD; Sandra Gollnick, PhD; Hassan Arshad, MD; Theresa M. Busch, PhD

TIME	ACTIVITY
1:00 PM – 1:29 PM	PAPDT Business Meeting

Clinical Science Update

TIME	ACTIVITY
1:30 PM – 2:00 PM	Clinical Roundtable – <i>Merrill A. Biel</i>

Clinical Abstracts

TIME	ABSTR	ACTIVITY
2:01 PM – 2:09 PM	150	PHOTODYNAMIC THERAPY FOR PREVENTION OF SKIN DYSPLASIA IN TRANSLATIONAL MEDICINE - FROM ANIMAL STUDIES TO ORGAN TRANSPLANT RECIPIENTS <i>Katrine Togsverd-Bo</i> ★, <i>Silje Haukali Omland</i> , <i>Søren Schwartz Sørensen</i> , <i>Hans Christian Wulf</i> , <i>Merete Hædersdal</i> Bispebjerg Hospital; Rigshospitalet, Copenhagen, Denmark
2:10 PM – 2:18 PM	151	NON-PIGMENTED HAIR REMOVAL USING PHOTODYNAMIC THERAPY <i>Hyoseung Shin</i> ★, <i>Ji-Seon Yoon</i> , <i>Semchin Munkhbayer</i> , <i>Wooseok Koh</i> , <i>Ohsang Kwon</i> Dongguk University Ilsan Hospital, Goyang; Seoul National University College of Medicine; JMO Dermatology Clinic, Seoul, South Korea
2:19 PM – 2:27 PM	152	CERVICAL INTRAEPITHELIAL NEOPLASIA GRADE 2: PILOT STUDY COMPARING EXCISION OF TRANSFORMATION ZONE AND PHOTODYNAMIC THERAPY <i>Renata Belotto</i> ★, <i>Roberto Santos</i> , <i>Daniela Silva</i> , <i>Raquel Fernandes</i> , <i>Jessica Crema</i> , <i>Milena Cruz</i> , <i>Bianca Assumpcao</i> , <i>Fernanda Carbinatto</i> , <i>Natalia Inada</i> , <i>Vanderlei Bagnato</i> Hospital Perola Byington; Universidade Nove de Julho, São Paulo, Brazil; Instituto de Física de São Carlos, São Carlos, Brazil
2:28 PM – 2:36PM	153	SURFACE MARKERS FOR IMAGE GUIDED INTERSTITIAL PHOTODYNAMIC THERAPY <i>Emily Oakley</i> ★→, <i>Brian Wrazen</i> , <i>Hassan Arshad</i> , <i>Gal Shafirstein</i> Buffalo, NY
2:37 PM – 2:45 PM		Q & A
2:46 PM – 3:29 PM		BREAK – View ePosters and Visit the Exhibit Hall

Basic Science Update

TIME	ACTIVITY
3:30 PM – 3:45 PM	Immunology of PDT – <i>Sandra Gollnick</i>
3:46 PM – 4:01 PM	HPPH PDT – <i>Hassan Arshad</i>
4:02 PM – 4:17 PM	Basic Science PDT – <i>Theresa M. Busch</i>
4:18 PM – 4:22 PM	Q & A

Science Abstracts

TIME	ABSTR	ACTIVITY
4:23 PM – 4:29 PM	154	ANTIMICROBIAL BLUE LIGHT INACTIVATION OF GRAM-NEGATIVE PATHOGENS IN BIOFILMS <i>Yucheng Wang, Ximing Wu, Clinton Murray, Michael Hamblin, David Hooper, Tianhong Dai</i> ★ Massachusetts General Hospital, Harvard Medical School, Boston, MA; Brooke Army Medical Center, Fort Sam, Houston, TX
4:30 PM – 4:36 PM	155	TOLERANCE OF PATHOGEN FREE TISSUES FOR PDT WITH FOLATE ADDRESSED PS IN OVARIAN PERITONEAL CARCINOSIS <i>Alfred Bassil, Henri Azais, Agnes Wacrenier, Serge Mordon</i> ★, <i>Celinie Frochet, Pierre Collinet, Nacim Betrouni</i> INSERM U1189 - CHRU Lille Service de Gynécologie, Lille, France; LRGP, UMR 7274 CNRS - Université de Lorraine, Nancy, France; Centre de Biologie Pathologie CHRU Lille, Lille, France
4:37 PM – 4:43 PM	156	DRUG-RESISTANT PANCREATIC CELLS EXHIBIT ALTERED EXTRACELLULAR MATRIX INTERACTION AND INCREASED SENSITIVITY TO PDT IN 3D CELL CULTURE <i>Gwendolyn Cramer, Dustin Jones, Seyedehrojin Jafari, Hamid El-Hamidi, Jonathan Celli</i> ★ University of Massachusetts, Boston, MA
4:44 PM – 4:50 PM	157	IN VITRO EFFECT PHOTODYNAMIC THERAPY WITH LED AND METHYLENE BLUE ON CANDIDA ALBICANS PRETREATED WITH GLUCOSE <i>Tamires Oliveira-Silva</i> ★, <i>Luis Suzuki, Ilka Kato, Alessandro Deana, Martha Ribeiro, Renato Prates</i> UNINOVE; IPEN-CNEN/SP, São Paulo, Brazil; UFABC, Sto André, Brazil
4:51 PM – 4:57 PM	158	A NOVEL DEVICE FOR INTRAOPERATIVE PHOTODYNAMIC THERAPY DEDICATED TO GLIOBLASTOMA TREATMENT <i>Clément Dupont</i> ★, <i>Nacim Betrouni, Jean-Baptiste Tylcz, Pascal Deleporte, Serge Mordon, Nicolas Reyns, Maximilien Vermandel</i> University Lille, Inserm, CHU Lille, U1189 - ONCO-THAI - Image Assisted Laser Therapy for Oncology, Lille, France
4:58 PM – 5:04 PM	159	DOSIMETRY DEDICATED TO INTERSTITIAL PHOTODYNAMIC TREATMENT FOR GLIOBLASTOMA <i>Clément Dupont</i> ★→, <i>Serge Mordon, Nacim Betrouni, Nicolas Reyns, Maximilien Vermandel</i> University Lille, Inserm, CHU Lille, U1189 - ONCO-THAI - Image Assisted Laser Therapy for Oncology, Lille, France
5:05 PM – 5:11 PM	160	IMAGING OF HYPOXIA MARKERS TO PREDICT RESPONSE OF PHOTODYNAMIC THERAPY <i>Srivalleesha Mallidi</i> ★, <i>Megumi Ichikawa, Zhiming Mai, Amjad Khan, Tayyaba Hasan</i> Harvard Medical School, Boston, MA
5:12 PM – 5:18 PM	161	<u>BEST OF PAPDT ABSTRACT SESSION AWARD RECIPIENT</u> OVERCOMING ENDOTHELIAL CELL-MEDIATED HETEROGENEITY AND CHEMORESISTANCE IN 3D TUMOR MODELS USING PDT-BASED COMBINATIONS <i>Imran Rizvi</i> ★, <i>Emma Briars, Anne-Laure Bulin, Sriram Anbil, Daniela Vecchio, Bryan Spring, Jonathan Celli, William Hanna, Tayyaba Hasan</i> Wellman Center for Photomedicine, Massachusetts General Hospital, Harvard Medical School; University of Massachusetts, Boston, MA
5:19 PM – 5:25 PM	162	CONFOCAL FLUORESCENCE IMAGING OF APDT TO EVALUATE DEPTH OF PENETRATION INTO P. GINGIVALIS AND T. DENTICOLA BIOFILMS <i>Stephen Rogers</i> ★→, <i>Kiyonobu Honma, Thomas Mang</i> University at Buffalo, Buffalo, NY
5:26 PM – 5:30 PM		Q & A

Basic Science & Translational Research – Abstract Session

Educational Needs These sessions promote understanding of basic processes of light interaction with tissue and cells, design of light-based diagnostic and therapeutic devices and techniques, and early translation of this knowledge to clinical application.

Participants Scientists, engineers, medical practitioners as well as other healthcare professionals involved in biomedical applications of lasers are invited to attend.

Background Requirements Participants should have a basic understanding or experience of how light interacts with tissues.

Instructional Content/Expected Learning Outcomes These sessions will provide attendees knowledge of cutting-edge advances in optical diagnostics and therapeutics, and their early translation to the clinical management of patients. Novel results are presented that will impact the development of new and more efficacious, light-based diagnostic and therapeutic devices and applications. Characterization of light sources and safety issues are also considered.

“Hot Topics”

- » New Applications of Preclinical/Clinical Therapeutic Technology.
- » Novel Imaging Modalities for Disease Diagnosis.

Chairs Thomas S. Mang, PhD; Serge R. Mordon, PhD

Award Speaker David H. Sliney, PhD

Spectroscopy

TIME	ABSTR	ACTIVITY
1:30 PM – 1:40 PM	12	WIRELESS NEAR-INFRARED SPECTROSCOPE TO REAL-TIME QUANTITATIVELY ASSESS DORSAL FOOT PERIPHERAL CIRCULATION IN PATIENTS WITH DIABETES FOOT ULCER: A PILOT STUDY <i>Yen Pin Lin</i> ★→, <i>Chang Cheng Chang</i> , <i>Zeng Wei Su</i> , <i>Yin-Shuo Chang</i> , <i>Borshyh Lin</i> , <i>Yu-Tsung Chen</i> , <i>Mei Yen Chen</i> Chang Gung Memorial Hospital, Chia Yi, Taiwan; Institute of Electro-Optical Engineering, National Chiao Tung University, Tainan, Taiwan; Institute of Nursing Research, Chang Gung University of Science and Technology, Taoyuan, Taiwan
1:41 PM – 1:51 PM	13	COMPARATIVE ANALYSIS OF BRUISE HEALING DYNAMICS BASED ON DIFFUSE REFLECTANCE SPECTROSCOPY AND PHOTOTHERMAL RADIOMETRY <i>Ana Marin</i> , <i>Luka Vidovič</i> , <i>Matija Milanič</i> , <i>Boris Majaron</i> ★ Jožef Stefan Institute, University of Ljubljana, Ljubljana, Slovenia
1:52 PM – 2:02 PM	14	NON-INVASIVE SKIN CANCER DIAGNOSIS USING MULTIMODAL OPTICAL SPECTROSCOPY <i>Austin Moy</i> ★, <i>Xu Feng</i> , <i>Mia Markey</i> , <i>Jason Reichenberg</i> , <i>James Tunnell</i> The University of Texas at Austin; Dell Medical School, Austin, TX
2:03 PM – 2:13 PM	15	MOLECULAR FLUORESCENCE FOR BIOMECHANICAL CHARACTERIZATION OF CORNEA <i>Genna Touchette</i> ★→, <i>Antonio Ortega-Martínez</i> , <i>Hong Zhu</i> , <i>Irene Kochevar</i> , <i>Walfre Franco</i> Eastern Michigan University, Ypsilanti, MI; Wellman Center for Photomedicine, Massachusetts General Hospital, Boston, MA; Shanghai First People, Shanghai, China
2:14 PM – 2:24 PM	16	MULTIPHOTON AUTOFLUORESCENCE MICROSPECTROSCOPY IN HAMSTER MODEL OF ORAL EPITHELIAL PRE-CANCER AND CANCER <i>Rahul Pal</i> ★→, <i>Kert Edward</i> , <i>Jinping Yang</i> , <i>Gracie Vargas</i> Galveston, TX; Mona, Jamaica
2:25 PM – 2:44 PM		Q & A
2:45 PM – 3:29 PM		BREAK – View ePosters and Visit the Exhibit Hall

Skin

TIME	ABSTR	ACTIVITY
3:30 PM – 3:40 PM	17	SKIN PERMEATION AND RETENTION EFFICACY OF NANOLIPOSOMAL CARRIER ASSISTED BY FRACTIONAL LASERS WITH OR WITHOUT COAGULATION <i>Boncheol Goo</i> ★, <i>Thiagaran Madheswaran</i> , <i>Rengarajan Baskaran</i> , <i>Yoonjung Kim</i> , <i>Aram Jo</i> , <i>Song Yeon Park</i> , <i>Bong-Kyu Yoo</i> Naeum Dermatology and Aesthetic Clinic; Seoul National University, Seoul, Korea; College of Pharmacy, Gacheon University; Inha University School of Medicine, Incheon, Korea
3:41 PM – 3:51 PM	18	SELECTIVE PHOTOTHERMOLYSIS - A DEEPER UNDERSTANDING USING THE ARRHENIUS RATE EQUATION TO EXAMINE THE TISSUE DENATURATION PROCESS <i>Michael Murphy</i> ★, <i>Per-Arne Torstensson</i> Dermalase, Glasgow, United Kingdom; Optopia, Kungsbacka, Sweden
3:52 PM – 4:02 PM	19	12 MONTHS OF CLINICAL FOLLOW UP FOR THE TREATMENT OF PERIORBITAL AND PERIORAL WRINKLES WITH THE ASSOCIATION OF FRACTIONAL CO ₂ LASER AND 1565nm IN 200 BRAZILIAN PATIENTS USING TRIDIMENSIONAL DOCUMENTATION <i>Elaine Marques</i> ★, <i>Guilherme Almeida</i> , <i>Leticia Almeida</i> , <i>Rachel Queiroz</i> , <i>Juliana Padua</i> , <i>Fabiolla Sih</i> HSL, São Paulo, Brazil
4:03 PM – 4:12 PM	20	A 48 MONTH CLINICAL FOLLOW UP OF FEMALE AND MALE PATTERN HAIR LOSS TREATMENT WITH A ONE MONTH FRACTIONAL LASER AND TRANSEPIDERMAL DRUG DELIVERY SESSION IN 100 BRAZILIAN PATIENTS <i>Elaine Marques</i> ★, <i>Guilherme Almeida</i> , <i>Leticia Almeida</i> , <i>Rachel Queiroz</i> , <i>Juliana Padua</i> , <i>Fabiolla Sih</i> HSL, São Paulo, Brazil
4:13 PM – 4:23 PM	21	ACNE SCARRING: A BREAKTHROUGH IN TREATMENT USING THE LATEST ENERGY-BASED DEVICES <i>Neil Sadick</i> ★, <i>Andrew Dorizas</i> , <i>Krista Bonhert</i> New York, NY
4:24 PM – 4:34 PM	22	FILLING OF FRACTIONAL LASER CHANNELS DEPENDS ON TYPE OF VEHICLE <i>Uffe Høgh Olesen</i> ★→, <i>Daniel Thaysen-Petersen</i> , <i>Mette Mogensen</i> , <i>Merete Haedersdal</i> Bispebjerg Hospital, Copenhagen, Denmark
4:35 PM – 4:45 PM	23	IMAGING OF PROLIFERATING KERATINOCYTE CELLS DURING EPITHELIALIZATION OF WOUNDS <i>IN VIVO</i> <i>Ying Wang</i> ★, <i>Juan Pablo Padilla-Martínez</i> , <i>Antonio Ortega-Martínez</i> , <i>Walfre Franco</i> Wellman Center for Photomedicine, Massachusetts General Hospital, Harvard Medical School, Boston, MA
4:46 PM – 5:06 PM		Q & A
5:07 PM – 5:27 PM		<u>CAROLINE AND WILLIAM MARK MEMORIAL AWARD RECIPIENT</u> A Half-Century of Lasers in Surgery and Medicine - <i>David H. Sliney</i>
5:28 PM – 5:30 PM		Q & A

Cutaneous Applications – Abstract Session

Educational Needs This session will explore the use of lasers and energy-based devices to treat a wide spectrum of cutaneous conditions. New devices, new uses of established devices, and controlled studies demonstrating objective evidence of treatment effects will be presented. Discourse surrounding these topics from attendees will be encouraged. Maximizing results and minimizing complications with energy-based devices will be a prime objective of this session.

Participants This session is for all health care practitioners, engineers, scientists, or any interested individuals working with lasers and energy-based devices. All health care personnel will benefit by learning how to maximize results of treatment of cutaneous conditions while minimizing complications.

Background Requirements Participants with a basic understanding of skin biology and physics will derive maximal benefit from the presentations, however, all meeting attendees are welcome to attend and contribute.

Instructional Content/Expected Learning Outcomes Attendees will learn about what's new in the field of lasers and energy-based devices. Presentations of new devices and new uses for established devices will provide attendees with data to incorporate into practice or research.

“Hot Topics”

- » Picosecond Era: Picosecond Lasers for Tattoos, Pigmentation, and Skin Rejuvenation.
- » New Devices and Novel Data for Body Contouring.
- » Advances in Fractionated Devices.

Chairs Emil A. Tanghetti, MD; Nazanin A. Saedi, MD; Thomas E. Rohrer, MD

Moderator Terrence Keaney, MD; Brian Biesman, MD

New Devices and Novel Data for Body Contouring

TIME	ABSTR	ACTIVITY
1:30 PM – 1:36 PM	49	A MULTI-CENTER STUDY OF A NON-INVASIVE 1060nm DIODE LASER FOR FAT REDUCTION OF THE FLANKS AND ABDOMEN 6 MONTH FOLLOW UP <i>Lawrence Bass★, Bruce Katz, Sean Doherty</i> Bass Plastic Surgery; JUVA Skin & Laser Center, New York, NY; Boston Plastic Surgery Associates, Concord, MA
1:37 PM – 1:43 PM	50	OBJECTIVE EVALUATION OF A NON-INVASIVE FAT REDUCTION WITH A 1060nm DIODE LASER FOR TREATMENT OF THE THIGHS AND BACK <i>Bruce Katz★, Lawrence Bass, Sean Doherty</i> JUVA Skin & Laser Center; Bass Plastic Surgery, New York, NY; Boston Plastic Surgery Associates, Concord, MA
1:44 PM – 1:50 PM	51	ULTRASOUND FINDINGS IN FAT FOLLOWING A 1060nm NON-INVASIVE DIODE LASER – CORRELATION WITH ANATOMIC FINDINGS <i>David McDaniel★, Robert Weiss, Sean Doherty, Bo Chen, Kerry Shaughnessy, Margaret Weiss, Karen Beasley, Christian Halvorson, Anne Mahoney</i> McDaniel Laser and Cosmetic Center, Virginia Beach, VA; Maryland Skin and Vein Institute, Hunt Valley, MD; Boston Plastic Surgery Associates, Concord, MA; Cynosure, Westford, MA
1:51 PM – 1:57 PM	52	CLINICAL EVALUATION OF FAT REDUCTION TREATMENT OF THE FLANKS AND ABDOMEN WITH A NON-INVASIVE 1060nm DIODE LASER: A MULTICENTER STUDY <i>Robert Weiss★, David McDaniel, Sean Doherty, Margaret Weiss, Karen Beasley, Christian Halvorson, Anne Mahoney, Kerry Shaughnessy</i> Maryland Skin and Vein Institute, Hunt Valley, MD; McDaniel Laser and Cosmetic Center, Virginia Beach, VA; Boston Plastic Surgery Associates, Concord, MA
1:58 PM – 2:08 PM		Q & A
2:09 PM – 2:15 PM	53	SAFETY AND EFFICACY OF CRYOLIPOLYSIS FOR NON-INVASIVE REDUCTION OF SUBMENTAL FAT <i>Suzanne Kilmer★, A. Jay Burns, Brian Zelickson</i> Laser and Skin Surgery of Northern California, Sacramento, CA; EpiCentre Skin Care and Laser Center, Dallas, TX; Zel Skin and Laser Specialists, Edina, MN

TIME	ABSTR	ACTIVITY
2:16 PM – 2:22 PM	54	SUBCUTANEOUS ADIPOSE TISSUE REDUCTION USING A NON-INVASIVE MONOPOLAR RADIOFREQUENCY DEVICE – A CASE STUDY WITH 7 SUBJECTS <i>Ashish Bhatia★, Lourdes Moldre, Amogh Kothare</i> Northwestern University, Chicago, IL; Cutera, Inc., Brisbane, CA
2:23 PM – 2:29 PM	55	THE EFFICACY IN REDUCING ABDOMINAL SUBCUTANEOUS FAT BY A NON-CONTACT RADIOFREQUENCY DEVICE IN CHINESE: A RETROSPECTIVE STUDY <i>Samantha Y.N. Shek★, Chi K. Yeung, Johnny C.Y. Chan, Henry H.L. Chan</i> The University of Hong Kong, Hong Kong, China
2:30 PM – 2:44 PM		Q & A
2:45 PM – 3:29 PM		BREAK – View ePosters and Visit the Exhibit Hall
3:30 PM – 3:36 PM	56	CRUISE: CELLFINA REGISTRY UNDER INVESTIGATION FOR SAFETY AND EFFICACY <i>Jeremy B. Green★, Roy G. Geronemus, Suzanne Kilmer, Simeon Wall Jr., Joel Cohen, Robert Weiss, Michael Kaminer, Tina Alster</i> Coral Gables, FL; New York, NY; Sacramento, CA; Shreveport, LA; Englewood, CO; Hunt Valley, MD; Chestnut Hill, MA; Washington, DC
3:37 PM – 3:43 PM	57	MULTI-CENTER PIVOTAL STUDY OF THE SAFETY AND EFFECTIVENESS OF A NEW PRECISION-GUIDED TISSUE RELEASE PROCEDURE FOR THE TREATMENT OF CELLULITE – 3 YEAR UPDATE <i>Michael S. Kaminer★, Deanne M. Robinson, William P. Coleman III, Robert Weiss, W. Patrick Coleman IV</i> SkinCare Physicians, Chestnut Hill, MA; Connecticut Dermatology Group, Mildford, CT; Coleman Cosmetic and Dermatologic Surgery Center, Metairie, LA; Maryland Laser Skin and Vein, Hunt Valley, MD
3:44 PM – 3:50 PM	58	MINIMALLY INVASIVE SUBCISION TREATMENT OF CELLULITE OF BUTTOCKS AND THIGHS <i>Jeremy Brauer★, Julia Neckman, Bradley Bloom, Leonard Bernstein, Yoon-Soo Cindy Bae, Robert Anolik, Ron Shelton, Roy Geronemus</i> Laser & Skin Surgery Center of New York, New York, NY
3:51 PM – 3:57 PM	59	CLINICAL TRIAL ASSESSING TREATMENT WITH MICRONEEDLE-BASED FRACTIONAL RADIOFREQUENCY FOR CELLULITE <i>Leyda Bowes★</i> Miami, FL
3:58 PM – 4:04 PM	60	SAFE ATTAINMENT OF FACE AND NECK TISSUE LIFTING RESPONSE IN FITZPATRICK SKIN TYPES II-VI, USING A MICRO-FOCUSED ULTRASOUND SYSTEM WITH IMAGING (MFU-V) – A CLINICAL CASE STUDY <i>Inder Raj Makin★, Shahin Nooreyzedan, Chiranjiv Chhabra</i> A.T. Still University, Mesa, AZ; Apollo Hospital; Skin Alive, New Delhi, India
4:05 PM – 4:11 PM	61	RETROSPECTIVE SAFETY STUDY OF COMBINING MICRO-FOCUSED ULTRASOUND WITH VISUALIZATION (MFU-V) WITH NEUROTOXINS AND FILLERS (HA AND CAHA) <i>Sabrina Fabi, William Werschler, Jeremy Green★, Daniel Mills II, Robert Weiss</i> Cosmetic Laser Dermatology, San Diego, CA; Spokane Dermatology Clinic/ Premier Clinical Research, Spokane, WA; Skin Research Institute, Coral Gables, FL; Aesthetic Plastic Surgical Institute, Laguna Beach, CA; Maryland Laser Skin and Vein, Hunt Valley, MD
4:12 PM – 4:22 PM		Q & A
4:23 PM – 4:29 PM	LB9	PROTOTYPE COOLCUP CRYOLIPOLYSIS APPLICATOR WITH OVER 40% REDUCED TREATMENT TIME DEMONSTRATES EQUIVALENT SAFETY AND EFFICACY WITH GREATER PATIENT PREFERENCE <i>Suzanne Kilmer★</i> Laser and Skin Surgery of Northern California, Sacramento, CA
4:30 PM – 4:36 PM	LB10	TREATMENT OF FACIAL AND UPPER NECK TISSUE LAXITY WITH A NOVEL MAGNETIC ENERGY EMITTING DEVICE <i>Jerome Garden★, Dina Yaghmai, Megan Calderon, Mary Massa, Abnoeal Bakus</i> Northwestern University; Physicians Laser and Dermatology Institute; Rush University Medical School, Chicago, IL

Fractional Drug

TIME	ABSTR	ACTIVITY
4:37 PM – 4:43 PM	62	THERMAL DAMAGE IMPEDES FRACTIONAL LASER-ASSISTED DRUG DELIVERY <i>Andrés Már Erlendsson</i> ★→, <i>Erlendur Karlsson</i> , <i>Apostolos G. Doukas</i> , <i>Ying Wang</i> , <i>Brijesh Bhayana</i> , <i>R. Rox Anderson</i> , <i>Merete Haedersdal</i> Wellman Center for Photomedicine, Massachusetts General Hospital, Harvard Medical School, Boston, MA; Uppsala DSP Consulting, Uppsala, Sweden

Diagnostics

TIME	ABSTR	ACTIVITY
4:44 PM – 4:50 PM	63	OBJECTIVE ASSESSMENT OF CUTANEOUS COLOR CHANGE FOLLOWING LASER THERAPY <i>Min-Jeong Cho</i> , <i>Rami Hallac</i> , <i>Alex Kane</i> , <i>James Seaward</i> ★ University of Texas Southwestern Medical Center; Children's Health System of Texas, Dallas, TX
4:51 PM – 4:57 PM	LB11 A/B	THE DIAGNOSTIC ROLE OF OPTICAL COHERENCE TOMOGRAPHY (OCT) IN MEASURING THE DEPTH OF BURN AND TRAUMATIC SCARS FOR MORE ACCURATE LASER DOSIMETRY: PILOT STUDY and REAL TIME VASCULAR OPTICAL COHERENCE TOMOGRAPHY (OCT) TO GUIDE CHOICE OF PULSE <i>Jill Waibel</i> ★, <i>Ashley Rudnick</i> Miami Dermatology and Laser Institute, Miami, FL
4:58 PM – 5:04 PM	LB12	A PILOT STUDY USING REFLECTANCE CONFOCAL MICROSCOPY IN THE EVALUATION ON EFFECT OF LASER MANAGEMENT OF HEMANGIOMA VASCULAR MELFOMATION AND PORT WINE STAIN <i>Guoyu Zhou</i> ★, <i>Hao Peng</i> , <i>Chuan Ma</i> Cosmetic Laser Center of Shanghai Ninth People's Hospital, Jiao Tong University School of Medicine, Shanghai, China
5:05 PM – 5:11 PM	LB13	COMBINED LASERS TREATMENT ACNE SCARS IN DARK SKIN <i>Kamel Messaoud Nacer</i> ★ Center Laser Surgery, Oran, Algéria
5:12 PM – 5:30 PM		Q & A

1:30 PM – 2:45 PM | ROOM: HYNES 108

ASLMS/HNODIS – Abstract Session

Optical Diagnostics II

Educational Needs Optical diagnostic methods make use of light to show tissue changes of different origin. This session will review current preclinical and clinical developments in the field of optical diagnostic methods for oncological and non-oncological indications in the upper aerodigestive tract.

Participants Designed for clinicians, scientists, students and members of industry.

Background Requirements No special background required for attendance.

Instructional Content/Expected Learning Outcomes The current state of the art for optical diagnostic methods in the upper aerodigestive tract will be examined. A clinically oriented overview of existing methods and possible future developments will be highlighted. It is expected that participants in these activities will identify gaps in their knowledge, competence or performance.

“Hot Topics”

- » State of the Art in head and neck optical diagnostics will be detailed.
- » New applications for optical coherence tomography in the head and neck area will be examined.
- » New methods such as dynamic optical contrast imaging will be presented and discussed.
- » A future outlook will be provided.

Chair Brian J.F. Wong, MD, PhD, FACS

Speaker Max J.H. Witjes, MD, DDS, PhD

TIME	ABSTR	ACTIVITY
1:30 PM – 1:35 PM		INTRODUCTION – <i>Brian Wong</i>
1:36 PM – 1:50 PM		Overview on Image Guided Surgery in the Neck and Head Field Using Tumor Specific Fluorescent Markers – <i>Max J.H. Witjes</i>
1:51 PM – 2:05 PM	119	FLUORESCENCE OF MOLECULES NATIVE TO TISSUE AS MARKER FOR WOUND HEALING IN SKIN <i>Juan Pablo Padilla-Martinez★, Ying Wang, Walfre Franco</i> Wellman Center for Photomedicine, Boston, MA
2:06 PM – 2:20 PM	120	EVALUATION OF EARLY RECOGNITION OF PRECANCEROUS AND CANCEROUS LESIONS IN MOUTH AND OROPHARYNX BY HYPERSPECTRAL IMAGING <i>Wiebke Laffers★, Stephan Westermann, Bianca Regeling, Boris Thies, Ron Martin, Andreas O.H. Gerstner, Friedrich Bootz, Nina-Alexa Mueller</i> University of Bonn, Bonn, Germany; Laboratory for Climatology and Remote Sensing, Institute for Geographie, University of Marburg, Marburg, Germany; Braunschweig, Germany
2:21 PM – 2:35 PM	121	ANALYSIS OF LASER SPECKLE IMAGES OF CARIOUS-LIKE LESIONS <i>João Vagner Silva★, Sandra Kalil Bussadori, Carolina Carvalho Bortoletto, Silvia Regina Garcia Olivan, Marcia Regina Cabral Oliveira, Alessandro Melo Deana</i> Uninove - Universidade 9 de Julho, São Paulo, Brazil
2:36 PM – 2:45 PM		Q & A

ASLMS/NAALT - Abstract Session

Physical Medicine and Rehabilitation

Educational Needs This session will present current clinical protocols and outcomes of photobiomodulation in the areas of physical medicine and rehabilitation sciences.

Participants This session is designed for medical and allied health professions or other individuals interested in applying photobiomodulation techniques to human applications or to research.

Background Requirements Participants should have a medical background or associated profession with some understanding of the basic tissue interactions, parameters and mechanisms of photobiomodulation devices.

Instructional Content/Expected Learning Outcomes Presentations will focus on the use of Laser/Light Therapy for conditions related to current clinical practice. Topics may include pain reduction, tissue and wound repair, and athletic performance enhancement. Additionally, practical and clinically relevant discussion of popular techniques and protocols for commonly treated clinical conditions will be presented.

“Hot Topics”

- » PBMT in exercise performance and recovery: from laboratory to clinical practice.
- » One of most novel uses of photobiomodulation, this area of research and clinical application has garnered interest from all areas of competition from amateur to professional. This new use for photobiomodulation has gained increasing popularity among athletes as a non-pharma means to improve performance and recovery.

Chairs Doug Johnson, ATC, EES, CLS; Nicholas Wise, DC

Speaker Ernesto Leal Junior, PhD, PT

TIME	ABSTR	ACTIVITY
1:30 PM – 1:40 PM		Introduction to Session: Value of PBM in PMR – <i>Douglas Johnson</i>
1:41 PM – 1:49 PM	141	EFFECTS OF LASER THERAPY AND GRIMALDI’S MUSCLE SHORTENING MANEUVER ON MOTOR CONTROL OF SUBJECTS WITH INCOMPLETE SPINAL CORD INJURIES <i>Diego Longo★→, Leonardo Longo, Paolo Lippi, Giulio Cherubini, Vanessa Mangé</i> Florence, Italy
1:50 PM – 2:09 PM		PBMT in Exercise, Performance and Recovery: From Laboratory to Clinical Practice – <i>Ernesto Leal Junior</i>
2:10 PM – 2:18 PM	142	CLINICAL EFFICACY OF LOW-LEVEL LIGHT HOME DEVICE FOR THE SYMPTOMS OF THE MENORRHAGIA: A PILOT STUDY <i>Boncheol Goo★, Do Young Kim, Ja Young Kwon</i> Seoul, Korea
2:19 PM – 2:31 PM		Case Studies on PBM in Chiropractic Care – <i>Nicholas Wise</i>
2:32 PM – 2:45 PM		Q & A



1:30 PM - 5:15 PM | ROOM: HYNES 103

Photobiomodulation – Abstract Session

Educational Needs The purpose of this session is to present and discuss the latest findings on basic mechanisms of photobiomodulation, pre-clinical and clinical investigations on the critical parameters, mechanism, and effectiveness of light as a therapy for a broad range of clinical applications. Light and its photonic effects and photo-medicine in general have gained recognition as an area of innovative and novel research with significant clinical implications.

Participants Scientists, engineers, medical practitioners, individuals in industry and other health care professionals involved in biomedical applications of light are invited to participate in these sessions.

Background Requirements Participants should have an understanding of light interaction with biological tissues and basic and clinical research.

Instructional Content/Expected Learning Outcomes This session will provide the latest data on basic science and clinical application of light in a wide spectrum of applications. The participants will increase their knowledge in this area and hopefully be stimulated to formulate new ideas to identify the mechanisms involved and the critical parameters needed for successful clinical application of light.

“Hot Topics”

- » Photobiomodulation therapy as a treatment for lung diseases characterized by oxidative stress and inflammation.
- » Photobiomodulation: a promising therapy for chronic low back and pain due to tooth extraction.
- » Clinical evidence for the use of photobiomodulation therapy for inflammatory skin disorders such as rosacea, psoriasis and eczema.

Chairs Juanita J. Anders, PhD; Praveen Arany, DDS, PhD

Moderator Vanessa Holanda, MD

Speaker Jeri-Anne Lyons, PhD

TIME	ABSTR	ACTIVITY
1:30 PM – 1:55 PM		Optimization of Photobiomodulation for the Treatment of Autoimmune Demyelination – <i>Jeri-Anne Lyons</i>
1:56 PM – 1:59 PM		Discussion
2:00 PM – 2:10 PM	170	LOW LEVEL LASER TREATMENT REDUCES OXIDATIVE STRESS INDUCED BY FORMALDEHYDE EXPOSURE BY THE MODULATION OF GENE EXPRESSION OF OXIDANT AND ANTIOXIDANT ENZYMES IN THE LUNG TISSUE <i>Rodrigo Macedo★, Felipe Gomes, Mayara Leal, Éric Barioni, Tarcio Braga, Niels Câmara, Sandra Farsky, Adriana Lino dos Santos Franco</i> Universidade Nove de Julho; Universidade de São Paulo, São Paulo, Brazil
2:11 PM – 2:14 PM		Discussion
2:15 PM – 2:25 PM	171	TREATMENT WITH LED DECREASES INFLAMMATION AND ELASTANCE IN EXPERIMENTAL MODEL OF IDIOPATHIC PULMONARY FIBROSIS <i>Robson Alexandre Brochetti★, Mayara Peres Leal, Raissa Rodrigues, Renata Kelly da Palma, Jessica Julioti Urbano, Vicente Franco de Oliveira, Alessandro Melo Deana, Ana Paula Ligeiro de Oliveira, Adriana Lino dos Santos Franco</i> University Nove de Julho, São Paulo, Brazil
2:26 PM – 2:29 PM		Discussion

TIME	ABSTR	ACTIVITY
2:30 PM – 2:40 PM	172	ACUTE AND CHRONIC EFFECTS OF A SINGLE LOW-LEVEL LASER APPLICATION ON CARDIAC REMODELING AFTER MYOCARDIAL INFARCTION <i>Fernando Pereira Carlos★, Martha Manchini, Ednei Luis Antônio, Adriana Girardi, Jairo Montemor, Ernesto Cesar Pinto Leal-Junior, Paulo de Tarso Camillo de Carvalho, Paulo Tucci, José Antonio Silva Junior, Andrey Jorge Serra</i> Universidade Nove de Julho; Universidade Federal de São Paulo; Instituto do Coração, Universidade de São Paulo, São Paulo, Brazil
2:41 PM – 2:44 PM		Discussion
2:45 PM – 3:29 PM		BREAK – View ePosters and Visit the Exhibit Hall
3:30 PM – 3:40 PM	173	LASER THERAPY EFFECT ON SURGICAL WOUND IN THE POST-OPERATIVE OF BARIATRIC SURGERY <i>Alecsander Ojea★, Nathali Pinto, Bruno Carvalho, Otavio Madi, Alexandre Naumann, Fabricio Silva, Sizanando Lima, Rafael Laurino Neto, Ivone Duarte, Maria Cristina Chavantes</i> Hospital do Mandaqui; Uninove, São Paulo, Brazil
3:41 PM – 3:44 PM		Discussion
3:45 PM – 3:55 PM	174	LIGHT EMITTING DIODE (LED) REDUCES LOCAL EFFECTS IN MICE EXPOSED TO BOTHROPS ASPER VENOM (BAV) <i>Ingrid Sestrem★, Jose Maria Gutierrez, Ana Maria Barbosa, Katia Moura, Stella Regina Zamuner</i> Universidade Nove de Julho; Universidade da Costa Rica, São Paulo, Brazil; Universidade do Vale do Paraíba, São Jose dos Campos, Brazil
3:56 PM – 3:59 PM		Discussion
4:00 PM – 4:10 PM	175	EFFECT OF PHOTOBIO-MODULATION ON ENDOTHELIAL CELL EXPOSED TO BOTHROPS JARARACA VENOM <i>Aline Silva★, Ana Tereza Franco, Luciana Miato, Catarina Teixeira, Silvia Zamuner, Stella Zamuner</i> Universidade Nove de Julho; Instituto Butantan, São Paulo, Brazil
4:11 PM – 4:14 PM		Discussion
4:15 PM – 4:25 PM	176	STRENGTH-TRAINING-LIKE EFFECTS OF LOW LEVEL LASER IRRADIATION IN RAT REGULAR ENDURANCE TRAINING <i>Timon Cheng-Yi Liu★, Fang-Hui Li, Yan-Ying Liu, Fei Qin, Tao Li, Jing-Gang Chen, Quan-Guang Zhang</i> Laboratory of Laser Sports Medicine, South China Normal University, Guangzhou, China; Institute of Molecular Medicine and Genetics, Medical College of Georgia at Georgia Regents University, Augusta, GA
4:26 PM – 4:29 PM		Discussion
4:30 PM – 4:40 PM	LB38	PHOTOBIO-MODULATION AND EXERCISE TRAINING CAUSES CARDIOPROTECTION IN MONOARTHRITIS INDUCED BY ZYMO-SAN <i>Luis Fernando Zamuner, Stella Regina Zamuner, Iris Callado Sanches, Katia De Angelis, M. Cristina Chavantes, Marcelo De Paula Silva★</i> Universidade Nove de Julho; Universidade São Judas Tadeu, São Paulo, Brazil
4:41 PM – 4:44 PM		Discussion
4:45 PM – 4:55 PM	177	LOW LEVEL LASER THERAPY (LLL) PRIOR TO MUSCLE INJURY MODULATES THE mRNA EXPRESSION OF IL-6 AND THE OXIDATIVE STRESS <i>Beatriz Ribeiro, Agnelo Alves, Tatiane Cantero, Danielle Rodrigues, Lucas Santos, Nadhia Souza, Danielle Dias, Kristianne Porta Fernandes, Kátia De Angelis, Raquel Agnelli Mesquita-Ferrari★</i> Universidade Nove de Julho, São Paulo, Brazil
4:56 PM – 4:59 PM		Discussion
5:00 PM – 5:10 PM	178	LOW-LEVEL LASER THERAPY (LLL) ATTENUATES THE OXIDATIVE DAMAGE AFTER ACUTE MUSCLE INJURY <i>Agnelo Alves★, Beatriz Ribeiro, Filipe Conti, Danielle Dias, Sandra Bussadori, Kátia De Angelis, Kristianne Porta Fernandes, Raquel Agnelli Mesquita-Ferrari</i> Universidade Nove de Julho, São Paulo, Brazil
5:11 PM – 5:15 PM		Discussion

2:45 PM - 3:30 PM | ROOM: HYNES HALL A

Ask Me Anything – Non-CME Q & A

Hosts Robert A. Weiss, MD; Tina S. Alster, MD

Description This event provides attendees with the opportunity to listen to and participate in an open discussion and question/answer session. Inquiries may focus on devices, clinical approaches, and personal recommendations for practice.

TIME	ACTIVITY
2:45 PM – 3:30 PM	Open Q&A – <i>Robert A. Weiss, Tina S. Alster</i>

3:30 PM – 5:30 PM | ROOM: HYNES 107

Women's Health – Abstract Session

Educational Needs The purpose of this session is to present and discuss a variety of energy based interventions that have been utilized to address vaginal and vulvar disorders as well as certain pelvic floor abnormalities.

Participants Scientists, engineers, medical practitioners, individuals in industry, and other health care professionals interested in the management of gynecologic, urogynecologic, and dermatologic disorders of the female pelvic floor.

Background Requirements Participants should have an understanding of how a variety of energy sources interact with vaginal and vulvar tissue.

Instructional Content/Expected Learning Outcomes This session will provide the latest data on a variety of energy sources currently being utilized for a variety of pelvic floor disorders. The participants will increase their knowledge on the use of these energy sources for a variety of very common quality of life disorders.

“Hot Topics”

- » Vulvar Disorders.
- » Pelvic Floor Dysfunction.
- » Genitourinary Syndrome of Menopause.

Chairs Mickey M. Karram, MD; Red M. Alinsod, MD

Vulvar Disorders

TIME	ABSTR	ACTIVITY
3:30 PM – 3:35 PM		Introduction – Mickey M. Karram, Red M. Alinsod
3:36 PM – 3:42 PM	179	VULVAR LICHEN SCLEROSUS: EVALUATION OF SEXUAL QUALITY OF LIFE AFTER TREATMENT WITH CLOBETASOL PROPIONATE OINTMENT AND PHOTODYNAMIC THERAPY Renata Belotto★, Bianca Assumpção, Maria Chavantes, Matheus Ribeiro, Roberto Santos, Daniela Silva UNINOVE; Hospital Perola Byington, São Paulo, Brazil
3:43 PM – 3:49 PM	180	TREATMENT OF A VULVAR PAGET DISEASE BY PHOTODYNAMIC THERAPY WITH A NEW LIGHT EMITTING FABRIC BASED DEVICE. Claire Vicentini★→, Olivier Carpentier, Jean-Baptiste Tylcz, Nacim Betrouni, Laurent Mortier, Serge Mordon Clinic of Dermatology, Lille University Hospital; U1189 - ONCO-THAI, Lille, France
3:50 PM – 3:56 PM	181	PHOTOBIMODULATION IS MORE EFFECTIVE AS THE CURRENT TREATMENT OF VULVAR LICHEN SCLEROSUS Renata Belotto★→, Raquel Fernandes, Roberto Santos, Bianca Silva, Maria Cristina Chavantes, Daniela Silva UNINOVE; Pérola Byington Hospital, São Paulo, Brazil
3:57 PM – 4:02 PM		Q & A

Pelvic Floor Dysfunction

TIME	ABSTR	ACTIVITY
4:03 PM – 4:08 PM		Introduction – Mickey M. Karram, Red M. Alinsod
4:09 PM – 4:15 PM	182	TRANSCUTANEOUS TEMPERATURE CONTROLLED RADIOFREQUENCY FOR ORGASMIC DYSFUNCTION Red Alinsod★ South Coast Urogynecology, Laguna Beach, CA
4:16 PM – 4:22 PM	183	PELVIC FLOOR DYSFUNCTION TREATMENT USING Er:YAG LASER Sabina Sencar★, Urska Bizjak-Ogrinc, Zdenko Vizintin Juna Clinic; Fotona, Ljubljana, Slovenia
4:23 PM – 4:29 PM	184	EVALUATION OF FRACTIONAL Er:YAG, 1470nm DIODE, AND HYBRID LASER TREATMENTS FOR VAGINAL RESURFACING R. Chad Deal★, Lionel Meadows Chattanooga, TN; Commerce, GA

TIME	ABSTR	ACTIVITY
4:30 PM – 4:36 PM	185	SEXUAL FUNCTION AND OVERALL SATISFACTION AFTER FRACTIONAL CO ₂ LASER VAGINAL REJUVENATION TREATMENT IN PREMENOPAUSAL WOMEN: A PILOT STUDY & SHORT-TERM RESULTS <i>Cesar Arroyo</i> ★, <i>Ruthie Amir</i> , <i>Konika Schallen</i> Hospital Montepincipe Madrid, Spain; Syneron Medical, Yokneam, Israel; Syneron Medical, Jacksonville, FL
4:37 PM – 4:43 PM	186	UP TO 3-YEAR FOLLOW UP OF PATIENTS WITH VAGINAL RELAXATION SYNDROME PARTICIPATING IN LASER VAGINAL TIGHTENING <i>Jorge Gaviria</i> ★, <i>Branka Korosec</i> , <i>Zdenko Vizintin</i> Korpo Laser Clinic, Caracas, Venezuela; Fotona Ljubljana, Slovenia
4:44 PM – 4:49 PM		Q & A

Genitourinary Syndrome of Menopause

TIME	ABSTR	ACTIVITY
4:50 PM – 4:56 PM		Introduction – <i>Mickey M. Karram</i> , <i>Red M. Alinsod</i>
4:57 PM – 5:03 PM	187	Er:YAG LASER THERAPY FOR GENITOURINARY SYNDROME OF MENOPAUSE (GSM) IN BREAST CANCER SURVIVORS <i>Marco Gambacciani</i> ★, <i>Marco Levancini</i> , <i>Zdenko Vizintin</i> Pisa University Hospital, Pisa, Italy; Clinica Alemana, Universidad Del Desarrollo, Santiago, Chile; Fotona, Ljubljana, Slovenia
5:04 PM – 5:10 PM	188	ERBIUM LASER TREATMENT OF VAGINAL ATROPHY - COMPARISON WITH HORMONAL REPLACEMENT THERAPY (HRT), 12 MONTHS FOLLOW-UP <i>Adrian Gaspar</i> , <i>Hugo Brandi</i> , <i>Valentin Gomez</i> , <i>Daniel Luque</i> , <i>Zdenko Vizintin</i> ★ Mendoza University, Mendoza, Argentina; Fotona, Ljubljana, Slovenia
5:11 PM – 5:17 PM	LB39	TREATMENT OF COEXISTENT LICHEN SCLEROSUS AND VULVO-VAGINAL ATROPHY WITH FRACTIONAL CO ₂ LASER THERAPY <i>Jeffrey Dell</i> ★ Institute for Female Pelvic Medicine, Knoxville, TN
5:18 PM – 5:24 PM	LB40	AN ASSESSMENT OF THE SAFETY AND EFFICACY OF THE SMARTXIDE2 FRACTIONAL CO ₂ LASER FOR THE TREATMENT OF VULVOVAGINAL ATROPHY <i>Patrick Lang</i> ★, <i>Sana Hussain</i> , <i>Mickey Karram</i> The Christ Hospital, Cincinnati, OH
5:25 PM – 5:30PM		Q & A

3:30 PM - 5:30 PM | ROOM: HYNES 108

ASLMS/HNODIS - Abstract Session

Photodynamic Therapy (PDT)

Educational Needs Photodynamic Therapy is a light based treatment used for different indications. This session will highlight current developments and possible future indications of PDT in the head and neck area.

Participants Designed for clinicians, scientists, students and members of industry.

Background Requirements No special background required for attendance

Instructional Content/Expected Learning Outcomes The current state of the art for head and neck PDT will be examined. A clinically oriented overview of PDT applications in the upper aerodigestive tract will be highlighted. The indications and contraindications of PDT will be reviewed. It is expected that participants in these activities will identify gaps in their knowledge, competence or performance.

“Hot Topics”

- » State of the Art in head and neck PDT will be detailed.
- » New light sources and applications will be presented and discussed.
- » New indications for PDT in the upper aerodigestive tract will be highlighted.
- » Results from a study on antimicrobial PDT in the oral cavity and the pharynx will be presented.

Chair Colin Hopper, BDS, MBBS

TIME	ABSTR	ACTIVITY
3:30 PM – 3:35 PM		Introduction – <i>Colin Hopper</i>
3:36 PM – 3:55 PM		PDT in the Head and Neck Area: Past, Present and Future – <i>Colin Hopper</i>
3:56 PM – 4:05 PM	122	IMPROVED HOMOGENEOUS LIGHT DISTRIBUTION FOR INTRAOPERATIVE PHOTODYNAMIC THERAPY (PDT) USING THE FREIBURG FLAP: A PRE-CLINICAL TEST <i>Joerg Lindenmann, Brian Wrazen, Emily Oakley, Tyger Howell, David Bellnier, Chukwumere Nwogu, Gal Shafirstein</i> ★ Division of Thoracic and Hyperbaric Surgery, Medical University of Graz, Graz, Austria; Photodynamic Therapy Center, Roswell Park Cancer Institute, Buffalo, NY
4:06 PM – 4:15 PM	123	LOW-COST BATTERY OPERATED DEVICES FOR INTRAORAL TUMOR IMAGING AND PHOTODYNAMIC THERAPY IN GLOBAL HEALTH SETTINGS <i>Hui Liu</i> ★, <i>Joshua Hempstead, Srivalleesha Mallidi, Amjad Khan, Imran Rizvi, Grant Rudd, Liam Daly, Filip Cuckov, Tayyaba Hasan, Jonathan Celli</i> University of Massachusetts; Wellman Center for Photomedicine, Massachusetts General Hospital, Boston, MA
4:16 PM – 4:25 PM	124	VARIABILITY OF LIGHT DISTRIBUTION DURING PHOTODYNAMIC THERAPY OF THE SINONASAL CAVITY <i>Baris Karakullukcu</i> ★, <i>Robert van Veen, Tessa van Doeveren, Ferrie van der Boom, Milena Smolic, Anke van Mourik, Ing Tan</i> Netherlands Cancer Institute, Amsterdam, Netherlands
4:26 PM – 4:35 PM	125	PHARYNGITIS AND TONSILLITIS - A NEW APPROACH FOR A SAFE TREATMENT WITHOUT ANTIBIOTICS <i>Kate Blanco</i> ★, <i>Natalia Inada, Fernanda Carbinatto, André Giusti, Cristina Kurachi, Vanderlei Bagnato</i>
4:36 PM – 4:45 PM	126	LIGHT-EMITTING DIODE (LED) THERAPY FOR POST-TREATMENT ERYTHEMA AFTER ABLATIVE FRACTIONAL LASER-ASSISTED PHOTODYNAMIC THERAPY (AFXL-PDT): A RANDOMIZED CONTROLLED TRIAL <i>Christiane Bay</i> ★, <i>Daniel Thaysen-Petersen, Anne-Cathrine Vissing, Peter Alshede Philipsen, Boncheol Goo, Merete Haedersdal</i> Bispebjerg Hospital, Copenhagen, Denmark; Clinique L Dermatology, Goyang, South Korea

TIME	ABSTR	ACTIVITY
4:46 PM – 4:55 PM	127	RETROSPECTIVE STUDY OF LASER-INDUCED THERMAL THERAPY FOR PATIENTS WITH RECURRENT HEAD AND NECK CANCER <i>Marcos Paiva★, Michael Bublik, Marcel Palumbo, Cecilia Eugenio, Joel Sercarz</i> Los Angeles, CA; São Paulo, Brazil
4:56 PM – 5:05 PM	LB31	PHOTODYNAMIC THERAPY IN THE MANAGEMENT OF BASAL CELL CARCINOMA: RETROSPECTIVE EVALUATION OF OUTCOME <i>Waseem Jerjes★, Zaid Hamdoon, Ahmed Sultan, Colin Hopper</i> University College, London, United Kingdom
5:06 PM – 5:15 PM	LB32	PHOTODYNAMIC THERAPY IN THE MANAGEMENT OF PERIORBITAL SKIN CANCER <i>Waseem Jerjes★, Zaid Hamdoon, Ahmed Sultan, Colin Hopper</i> University College, London, United Kingdom
5:16 PM – 5:30 PM		Q & A

Early Career – Abstract Session

Educational Needs This session will educate the participants on novel uses and applications of lasers and light based devices in medical, cosmetic, and surgical dermatology.

Participants This session is designed for residents, fellows, and medical students.

Background Requirements Participants should have a basic knowledge of laser and light based devices.

Instructional Content/Expected Learning Outcomes After this session, participants will gain insight into new clinical research and basic science involving lasers and light based energy devices for multiple medical conditions.

“Hot Topics”

- » Basic Science.
- » Medical Applications of Lasers and Light Based Energy Devices.
- » Lasers for Pigmentary Disorders.
- » Cosmetic Applications of Lasers.

Chairs Vineet Mishra, MD; Anthony M. Rossi, MD;

Moderators Bradley S. Bloom, MD; Elizabeth Geddes, MD

Basic Science

TIME	ABSTR	ACTIVITY
7:00 AM – 7:05 AM		Introduction – <i>Vineet Mishra, Anthony Rossi</i>
7:06 AM – 7:10 AM	79	<u>BEST OVERALL BASIC SCIENCE AND TRANSLATIONAL RESEARCH AWARD RECIPIENT & OUTSTANDING EARLY CAREER ABSTRACT AWARD RECIPIENT</u> INVESTIGATING THE TIME FRAME OF DRUG-APPLICATION FOR OPTIMAL UPTAKE IN AFXL-EXPOSED SKIN - A RANDOMIZED CONTROLLED CLINICAL TRIAL <i>Christina Banzhaf★→, Christiane Bay, Daniel Thaysen-Petersen, Peter Philipsen, Mette Mogensen, Merete Haedersdal</i> Bispebjerg Hospital, Copenhagen, Denmark
7:11 AM – 7:15 AM	80	LASER HAIR REDUCTION IN FAUN TAIL <i>Rohan Anand★, Niteen Dhepe</i> Skin City, Pune, India
7:16 AM – 7:20 AM	81	A NEW PATH IN DEFINING LIGHT PARAMETERS FOR HAIR GROWTH: DISCOVERY AND MODULATION OF LIGHT SENSITIVE RECEPTORS IN HUMAN HAIR FOLLICLES <i>Serena Buscone★→, Bianca Raafs, Marijke A.A. van Vlimmeren, Andrei Mardaryev, Natallia E. Uzunbajakava, Natasha Botchkareva</i> University of Bradford, Centre for Skin Sciences, Bradford, United Kingdom; ENTER-group; Philips Electronics B.V., Eindhoven, The Netherlands
7:21 AM – 7:25 AM	82	<u>OUTSTANDING EARLY CAREER ABSTRACT AWARD RECIPIENT</u> LASER GENERATED SHOCKWAVES ENHANCE ANTIBACTERIAL ACTIVITY AGAINST BIOFILMS <i>IN VITRO</i> <i>Edward Kuan★→, William Yao, Nathan Francis, Sam Marton, Marian Banh, Marisol Castellanos, Valory Banashek, Maie St. John, Warren Grundfest, Zachary Taylor</i> University of California, Los Angeles, CA
7:26 AM – 7:30 AM	83	MITIGATION OF EPIDERMAL GROWTH FACTOR INHIBITOR INDUCED SIDE EFFECTS UTILIZING MELANIN AND VASCULAR SPECIFIC LASERS <i>Karen Kuo★→, Bernice Kwong, Zakia Rahman,</i> Stanford University School of Medicine, Redwood City, CA
7:31 AM – 7:35 AM	84	IMPACT OF VARIABILITY OF THE OPTICAL PROPERTIES OF SKIN LAYERS ON PREDICTION OF PHOTON DENSITY USING A MONTE CARLO MODEL <i>Charles Mignon★, Natallia E. Uzunbajakava, Natasha Botchkareva, Desmond J. Tobin, Mounir Zeitouny</i> University of Bradford, Centre for Skin Sciences, Bradford, United Kingdom; Philips Electronics B.V., Eindhoven, Netherlands

TIME	ABSTR	ACTIVITY
7:36 AM – 7:40 AM	85	HUMAN SKIN AND HAIR CAN SEE LIGHT: UNRAVELLING EXPRESSION OF PHOTORECEPTORS TOWARDS IMPROVED LIGHT THERAPIES FOR HAIR AND SKIN DISORDERS <i>Natallia E. Uzunbajakava★, Irene Castellano, Charles Mignon, Serena Buscone, Desmond J. Tobin, Natasha Botchkareva, M Julie Thornton</i> Philips Electronics B.V., Eindhoven, Netherlands; University of Bradford, Centre for Skin Sciences, Bradford, United Kingdom
7:41 AM – 7:45 AM	LB24	ABLATIVE FRACTIONAL RESURFACING FOR TREATMENT OF FOCAL DERMAL HYPOPLASIA IN A PEDIATRIC PATIENT WITH GOLTZ SYNDROME <i>Carol Cheng★, David Ginsberg, David Ozog, Marsha Chaffins, Andrew Krakowski</i> Rady Children's Hospital, San Diego, CA; Henry Ford Hospital, Detroit, MI
7:46 AM – 7:51 AM		Q & A

Medical Applications of Lasers and Light Based Energy Devices

TIME	ABSTR	ACTIVITY
7:52 AM – 7:56 AM	86	ABLATIVE FRACTIONAL LASER RESURFACING: A POWERFUL TOOL TO HELP RESTORE FORM AND FUNCTION DURING INTERNATIONAL HUMANITARIAN AND MEDICAL EXCHANGE MISSIONS <i>Carrick Burns★→, Andrew Basnett, Johannah Valentine, Peter Shumaker</i> Naval Medical Center, San Diego, CA
7:57 AM – 8:01 AM	87	AN ASSESSMENT OF LASER TRAINING DURING DERMATOLOGY RESIDENCY <i>Sonoa Au★→, Juliana Choi, Maria Tsoukas</i> Advanced Dermatology, PC, New York, NY; University of Pennsylvania, Philadelphia, PA; University of Illinois, Chicago, IL
8:02 AM – 8:06 AM	88	ABLATIVE FRACTIONAL LASER RESURFACING WITH TOPICAL PAROMOMYCIN AS ADJUNCTIVE TREATMENT FOR A RECALCITRANT CUTANEOUS LEISHMANIASIS WOUND <i>Andrew Basnett★, Tuyet Nguyen, Christopher Cannavino, Andrew Krakowski</i> Naval Medical Center, San Diego, CA; Rady Children's Hospital, San Diego, CA
8:07 AM – 8:11 AM	89	UPDATE ON HYBRID FRACTIONAL ABLATIVE AND NON-ABLATIVE RESURFACING OF ACTINIC KERATOSES OFF OF THE FACE <i>Megan Brown★, Arisa Ortiz</i> University of California, San Diego, CA
8:12 AM – 8:16 AM	90	SUCCESSFUL TREATMENT OF IN-TRANSIT MELANOMA METASTASES WITH A FRACTIONAL ABLATIVE CARBON DIOXIDE LASER <i>Pooja Chitgopeker★, Marta VanBeek, Nkanyezi Ferguson</i> University of Iowa Hospitals and Clinics, Iowa City, IA
8:17 AM – 8:21 AM	91	ANTIMICROBIAL PROPHYLAXIS IN TRANSPLANT RECIPIENTS UNDERGOING FULL-FACE LASER RESURFACING: CASE REPORT AND RECOMMENDATIONS <i>Brian Hibler★, Drew Saylor, Peter Chin-Hong, Sarah Arron</i> Madison, WI; University of California, San Francisco, CA
8:22 AM – 8:26 AM	92	AESTHETIC IMPROVEMENT AND PAIN TREATMENT OF ONYCHODYSTROPHY USING FRACTIONATED CARBON DIOXIDE LASER: CASE REPORT AND REVIEW OF LASER TREATMENT OF NON-INFECTIOUS ONYCHODYSTROPHY <i>Derek Ho★, Jared Jagdeo</i> Sacramento VA Medical Center, Mather, CA
8:27 AM – 8:31 AM	93	EFFECT OF PHOTODYNAMIC THERAPY IN THE TREATMENT OF HALITOSIS IN ADOLESCENTS - CLINICAL TRIAL AND MICROBIOLOGICAL ANALYSIS <i>Ana Carolina Mota-Ciarcia, Renato Prates, Marcela Gonçalves, Larissa Costa★→, Alessandro Deana, Raquel Mesquita-Ferrari, Kristianne Fernandes, Anna Carolina Horliana, Cristiane França, Sandra Bussadori</i> University of Nove de Julho, São Paulo, Brazil
8:32 AM – 8:36 AM	94	ROLE OF DERMOSCOPY IN DIRECTING LASER THERAPY <i>Dennis Porto★, David Ozog</i> Henry Ford Health System, Detroit, MI
8:37 AM – 8:41 AM	95	TREATMENT OF ACTINIC PURPURA UTILIZING LONG-PULSED, FREQUENCY-DOUBLED Nd:YAG LASER (532nm) <i>Nathanial Mileta★→, Catherine DiGiorgio, Yakir Levin, Mathew Avram</i> Massachusetts General Hospital, Dermatology Laser and Cosmetic Center, Boston, MA

TIME	ABSTR	ACTIVITY
8:42 AM – 8:46 AM	96	A REVIEW OF CONFOCAL MICROSCOPY FOR INFLAMMATORY SKIN DISORDERS <i>Farhaad Riyaz★→, David Ozog</i> Henry Ford Hospital, Detroit, MI
8:47 AM – 8:51 AM	97	595nm PULSED DYE LASER WITH INTRALESIONAL CORTICOSTEROIDS IN THE TREATMENT OF DIFFUSE KELOIDAL AND HYPERTROPHIC SCARS FROM PITYRIASIS LICHENOIDES ET VARIOLIFORMIS ACUTA (PLEVA) <i>Sandeep Saluja★, Julia Curtis, Erika Summers</i> University of Utah, Salt Lake City, UT
8:52 AM – 8:56 AM		<i>Cancellation</i>
8:57 AM – 9:01 AM	99	NON-ABLATIVE FRACTIONAL 1550nm LASER FOR THE TREATMENT OF NEVUS SEBACEUS <i>Selina Singh★, Elizabeth Geddes, Paul Friedman</i> Houston, TX
9:02 AM – 9:06 AM	LB25	TREATMENT OF SEBACEOUS HYPERPLASIA AND RESULTING PURPURA WITH PULSE DYE LASER <i>Paul Graham, Stephen Eubanks</i> St. Joseph Mercy Dermatology, Ann Arbor, Michigan; Denver Dermatology and Laser Center, Denver, CO
9:07 AM – 9:37 AM		Q & A / LASER QUIZ

Lasers for Pigmentary Disorders

TIME	ABSTR	ACTIVITY
9:38 AM – 9:41 AM		BREAK
9:42 AM – 9:46 AM	100	REPIGMENTATION OF FACIAL HYPOMELANOSIS WITH NON-ABLATIVE FRACTIONATED LASER <i>Mayra Maymone★, Neelam Vashi</i> Boston University School of Medicine, Boston, MA
9:47 AM – 9:51 AM	LB26	<i>IN VIVO</i> MULTIPHOTON MICROSCOPY OF AMELANOTIC MELANOMA <i>Joy Makdisi★, Michael McLeod, Mihaela Balu, Sebastien de Feraudy, Bruce J. Tromberg, Christopher B. Zachary, Kristen M. Kelly</i> University of California-Irvine; Beckman Laser Institute, Irvine, CA
9:52 AM – 9:56 AM	102	LOCALIZED ARGYRIA AFTER Nd:YAG THERAPY FOR LICHEN STRIATUS IN A PATIENT WITH REMOTE USE OF SILVER SULFADIAZINE <i>Richard Torbeck★, Nazanin Saedi</i> Thomas Jefferson University, Philadelphia, PA
9:57 AM – 10:01 AM		Q & A

Cosmetic Applications of Lasers

TIME	ABSTR	ACTIVITY
10:02 AM – 10:06 AM	103	A LOOK AT PATIENT USE OF AESTHETIC INFORMATION SOURCES AND PUBLIC PHYSICIAN RATINGS <i>Kristen Elkins★→, Cortney Donaldson, Louis Scafuri, Christopher Zachary</i> University of California, Irvine, CA; Tustin, CA
10:07 AM – 10:11 AM	104	COMBINATION LONG PULSED 1064 Nd:YAG LASER AND BROAD BAND LIGHT MAXIMIZES OUTCOMES IN ROSACEA TREATMENT <i>Zakia Rahman, Monica Enamandram★</i> Stanford Hospital and Clinics, Redwood City, CA
10:12 AM – 10:16 AM	105	SELF-INFLICTED "CUTTING" SCARS TREATED WITH THE FRACTIONATED CO ₂ LASER AND PULSED DYE LASER <i>Jill Henley★, Elizabeth Noble</i> Geisinger Medical Center, Danville, PA
10:17 AM – 10:21 AM	106	LONG TERM RESULTS OF A PATIENT WITH PARADOXICAL HYPERTRICHOSIS AFTER LASER EPILATION <i>Adam Honeybrook★, Tascha Crossing, Nicole Langelier, Julie Woodward</i> Duke University Hospital, Durham, NC
10:22 AM – 10:26 AM	107	CLINICAL EVALUATION OF A NOVEL DIODE WAVELENGTH (1060nm) FOR THE TREATMENT OF HYPERTRICHOSIS <i>Haider Bangash★, Omar Ibrahim</i> Connecticut Skin Institute, Stamford, CT
10:27 AM – 10:31 AM	108	EPIDEMIOLOGY, OUTCOMES AND PATIENT SATISFACTION OF PATIENTS UNDERGOING FRACTIONAL CO ₂ LASER TREATMENT FOR MATURE BURN SCARRING <i>Muhammad Umair Javed★→, Leigh Sanyaolu, Max Murison</i> Welsh Centre for Burns and Plastic Surgery, Swansea, United Kingdom

TIME	ABSTR	ACTIVITY
10:32 AM – 10:36 AM	109	SUCCESSFUL TREATMENT OF RHINOPHYMA WITH FRACTIONATED CARBON DIOXIDE LASER IN AN AFRICAN-AMERICAN MAN: CASE REPORT AND REVIEW OF RHINOPHYMA TREATMENTS <i>Ekaterina Kraeva</i> ★, <i>Jared Jagdeo</i> University of California Davis, Sacramento, CA
10:37 AM – 10:41 AM	110	<u>OUTSTANDING EARLY CAREER ABSTRACT AWARD RECIPIENT</u> COMPARISON OF Er:YAG LASER AND BIPOLAR RADIOFREQUENCY COMBINED WITH INFRARED DIODE LASER FOR THE TREATMENT OF ACNE SCARS: DIFFERENTIAL EXPRESSION OF TGFβ ¹ ISOFORMS MAY BE ASSOCIATED WITH DIFFERENCES IN EFFICACY BETWEEN ABLATIVE AND NON-ABLATIVE LASER TREATMENT <i>Seonguk Min</i> ★→, <i>Ji Young Yoon</i> , <i>Seon Yong Park</i> , <i>Hyuck Hoon Kwon</i> , <i>Dae Hun Suh</i> Seoul National University College of Medicine; Acne and Rosacea Research Laboratory, Seoul National University Hospital, Seoul, South Korea
10:42 AM – 10:46 AM	111	SOCIAL MEDIA ANALYSIS OF PATIENT SATISFACTION FOR LASER AND LIGHT PROCEDURES <i>Shuai "Steve" Xu</i> ★→, <i>Ashish Bhatia</i> Northwestern University, Chicago, IL
10:47 AM – 10:51 AM	LB27	A PROSPECTIVE SPLIT-FACE COMPARATIVE STUDY OF PERIORBITAL WRINKLE TREATMENTS: FRACTIONAL ERBIUM-DOPED YTTRIUM ALUMINUM GARNET LASER, INTENSE PULSED LIGHT, AND TOPICAL 0.1% TRETINOIN CREAM <i>So Eun Park</i> ★ Kangdong Sacred Heart Hospital, Seoul, South Korea
10:52 AM – 11:00 AM		Q & A

Cutaneous Applications – Abstract Session

Educational Needs This session will explore the use of lasers and energy-based devices to treat a wide spectrum of cutaneous conditions. New devices, new uses of established devices, and controlled studies demonstrating objective evidence of treatment effects will be presented. Discourse surrounding these topics from attendees will be encouraged. Maximizing results and minimizing complications with energy-based devices will be a prime objective of this session.

Participants This session is for all health care practitioners, engineers, scientists, or any interested individuals working with lasers and energy-based devices. All health care personnel will benefit by learning how to maximize results of treatment of cutaneous conditions while minimizing complications.

Background Requirements Participants with a basic understanding of skin biology and physics will derive maximal benefit from the presentations, however, all meeting attendees are welcome to attend and contribute.

Instructional Content/Expected Learning Outcomes Attendees will learn about what's new in the field of lasers and energy-based devices. Presentations of new devices and new uses for established devices will provide attendees with data to incorporate into practice or research.

“Hot Topics”

- » Picosecond Era: Picosecond Lasers for Tattoos, Pigmentation, and Skin Rejuvenation.
- » New Devices and Novel Data for Body Contouring.
- » Advances in Fractionated Devices.

Chairs Emil A. Tanghetti, MD; Nazanin A. Saedi, MD; Thomas E. Rohrer, MD

Advances in Fractionated Devices & Late Breaking

TIME	ABSTR	ACTIVITY
7:00 AM – 7:01 AM		Introduction – <i>Emil A. Tanghetti</i>
7:02 AM – 7:08 AM	LB14	ROBOTIC SITE MAKING FOR FUE HAIR TRANSPLANTATION - ACCURACY AND SAFETY <i>Dany Touma*</i> , <i>Rima Sleiman</i> American University of Beirut; Boston University, Beirut, Lebanon
7:09 AM – 7:15 AM	LB15	THE AFTERCARE WITH HAIRDRYER IMPROVES RESULTS OF Nd:YAG TREATMENT FOR ONYCHOMYCOSIS <i>Roman Smucler*</i> Charles University, Prague, Czech Republic
7:16 AM – 7:22 AM	LB16	CLINICAL OBSERVATION OF 186 CASES OF SUBCUTANEOUS CAVERNOUS HEMANGIOMA TREATED BY Nd:YAG CONTINUOUS LASER PERCUTANEOUS INTERVENTIONAL THERAPY <i>Zundi Xu*</i> , <i>Jie Hou</i> The Third Hospital of Beijing Armed Police Corps, Beijing, China
7:23 AM – 7:29 AM	LB17	HISTOLOGICAL EVALUATION FOR LASER DEPTH OF <i>EX VIVO</i> ABDOMINOPLASTY SKIN FOLLOWING FRACTIONATED TREATMENT WITH A HIGH INTENSITY TRADITIONAL, FRACTIONAL AND FUSION CARBON DIOXIDE LASER <i>Jill Waibel*</i> , <i>Adam Wulkan</i> , <i>Ashley Rudnik</i> Miami Dermatology and Laser Institute; University of Miami, Miami, FL
7:30 AM – 7:36 AM	64	FRACTIONATED CO ₂ LASER AND BURN SCARS: EVALUATION OF POST-TREATMENT SCAR APPEARANCE <i>Nathaniel Miletta*→</i> , <i>Kachiu Lee</i> , <i>Katherine Siwy</i> , <i>Jason Clark</i> , <i>Joshua Shofner</i> , <i>Matthias Donelan</i> , <i>R. Rox Anderson</i> Wellman Center for Photomedicine; Shriners Hospitals for Children, Boston, MA
7:37 AM – 7:43 AM	65	THE SAFETY PROFILE OF FRACTIONATED CO ₂ (10,600nm) LASER RESURFACING ON EXTRAFACIAL SKIN: A RETROSPECTIVE REVIEW <i>Bradley Bloom*</i> , <i>Adele Haimovic</i> , <i>Julia Neckman</i> , <i>Jeremy Brauer</i> , <i>Leonard Bernstein</i> , <i>Yoon-Soo Cindy Bae</i> , <i>Elliot Weiss</i> , <i>Robert Anolik</i> , <i>Roy Geronemus</i> Laser & Skin Surgery Center of New York, New York, NY

TIME	ABSTR	ACTIVITY
7:44 AM – 7:50 AM	66	A PILOT STUDY OF THE COMBINED USE OF FRACTIONAL CARBON DIOXIDE LASER (ACUPULSE™) AND INTRADERMAL AIR DISSECTOR IN THE TREATMENT OF ATROPHIC ACNE SCARS IN ASIAN PATIENTS <i>Victoria Belo★, Guada Santos-Capiz, Michelle Villanueva</i> Belo Medical Group, San Juan City, Philippines
7:51 AM – 7:57 AM	67	INSULATED MICRONEEDLE RF TREATMENT OF ACNE SCARS <i>Christian Halvorson★, Robert Weiss, Anne Mahoney</i> Maryland Skin and Vein Institute, Baltimore, MD
7:58 AM – 8:04 AM	68	RADIOFREQUENCY RESURFACING: A SINGLE TREATMENT APPROACH <i>Neal Varughese★, Amy Tank, Bradley Bloom, David Goldberg</i> Skin Laser & Surgery Specialists of NY/NJ, New York, NY
8:05 AM – 8:11 AM	69	EVALUATION OF A SINGLE TREATMENT OF 1470/2940nm HYBRID FRACTIONAL LASER FOR FACIAL REJUVENATION <i>Mary Beth Mudd★</i> New You Center for Advanced Medical Aesthetics, Columbus, OH
8:12 AM – 8:22 AM		Q & A
8:23 AM – 8:29 AM	LB18	TOPICAL RAPAMYCIN COMBINED WITH PULSED DYE LASER IN THE TREATMENT OF PORT WINE STAIN: A PROSPECTIVE SIDE-BY-SIDE SELF-CONTROL STUDY <i>Gang Ma★, Pinru Wu</i> Cosmetic Laser Center, Shanghai Ninth Peoples Hospital; Jiaotong University, School of Medicine, Shanghai, China
8:30 AM – 8:36 AM	LB19	PROSPECTIVE, RANDOMIZED, CONTROLLED SPLIT-FACE STUDY OF THE 532nm KTP LASER AND 595nm PULSED DYE LASER FOR THE TREATMENT OF ERYTHEMATOTELANGIECTATIC ROSACEA AND PAPULOPUSTULAR ROSACEA <i>Jill Waibel★, Adam Wulkan, Ashley Rudnik</i> Miami Dermatology and Laser Institute; University of Miami, Miami, FL
8:37 AM – 8:42 AM	LB20	COMBINATION LASER TREATMENT FOR IMMEDIATE POST-SURGICAL SCARS: RETROSPECTIVE ANALYSIS OF 33 IMMATURE SCARS <i>Yongsoo Lee★, Hongsoek Kim, Wooram Kim, Hyugjun Sim, Haksoep Park, Park</i> WYNE Dermatology & Plastic Surgery Clinic of Cheongju, Chungbuk and Jeju, Jeju-do, South Korea
8:43 AM – 8:59 AM	LB21	LONG TERM FOLLOW UP USING A RECENTLY DEVELOPED RADIOFREQUENCY ENERGY - ALEXANDRITE LASER HAIR REMOVAL DEVICE <i>Jerome Garden★, Megan Calderon, Pedram Gerami</i> Northwestern University; Physicians Laser and Dermatology Institute, Chicago, IL
8:50 AM – 8:56 AM	LB22	LASER HAIR REMOVAL: WHAT IS IN THE PLUME? <i>Kachiu Lee Higgins★, Oge Onwudiwe, Emily Eshleman, Rui Hu, Veronica Xu, Mallory LeBlanc, Lisa Rokoff, Mathew Avram</i> Massachusetts General Hospital, Boston, MA
8:57 AM – 9:07 AM		Q & A
9:08 AM – 9:14 AM		BREAK

Hair

TIME	ABSTR	ACTIVITY
9:15 AM - 9:21 AM	70	LONG TERM COMPARISON OF THE NEW LARGE SPOT VACUUM ASSISTED HANDPIECE vs THE SMALL SIZE TRADITIONAL HANDPIECE OF THE 800nm DIODE LASER <i>Nour Youssef★, Alain Rizk, Omar Ibrahim, Zeina Tannous</i> LAU University Medical Center- Rizk Hospital, Beirut, Lebanon; Connecticut Skin Institute, Stanford, CT; Wellman Center for Photomedicine Massachusetts General Hospital, Harvard Medical School, Boston, MA
9:22 AM – 9:28 AM	71	CLINICAL EVALUATION OF 1060nm DIODE LASER VACUUM-ASSISTED HANDPIECE WITHOUT TOPICAL ANESTHETIC IN ALL FITZPATRICK SKIN TYPES - MULTI-SITE STUDY <i>Edward Ross★, Suzanne Kilmer, Amanda Lloyd</i> Scripps Clinic, San Diego, CA; Laser and Skin Surgery Med Group, Sacramento, CA
9:29 AM – 9:35 AM	72	AXILLARY ODOR REDUCTION FOLLOWING MICROWAVE TREATMENT – A RANDOMIZED, SPLIT-PATIENT STUDY <i>Edward Ross★, John Murray, Jorge Lujan-Zilbermann</i> Scripps Clinic, San Diego, CA; Hilltop Research, St Petersburg, FL

Acne

TIME	ABSTR	ACTIVITY
9:36 AM – 9:42 AM	73	A RANDOMIZED, BLINDED, SINGLE-CENTERED, PLACEBO-CONTROLLED TRIAL OF PULSE DYED LASER (CHROMOGENEX REGENLITE TRANSFORM) IN THE TREATMENT OF INFLAMMATORY ACNE VULGARIS <i>Neil Sadick★, Andrew Dorizas, Krista Bonhert</i> New York, NY
9:43 AM – 9:49 AM	74	ACNE TREATMENT VIA SELECTIVE PHOTOTHERMOLYSIS OF SEBACEOUS FOLLICLES WITH GOLD MICROPARTICLES AND Nd:YAG LASER <i>Witold Owczarek, Agnieszka Nawrocka, Katarzyna Konchanska, Elwira Paluchowska, Katarzyna Podolec, Magdalena Pirowska, Anna Wojas-Pelc, Dilip Paithankar★, E. Victor Ross</i> Sebacia, Inc., Duluth, GA; Military Institute of Medicine, Warsaw, Poland; Jagiellonian University, Krakow, Poland; Scripps Clinic, San Diego, CA
9:50 AM – 10:00 AM		Q & A

Vascular & Late Breaking

TIME	ABSTR	ACTIVITY
10:01 AM – 10:07 AM	75	<u>BEST OF CUTANEOUS APPLICATIONS ABSTRACT SESSION AWARD RECIPIENT</u> TRASER: PRELIMINARY RESULTS FROM A CLINICAL TRIAL FOR THE TREATMENT OF NASAL TELANGIECTASIAS <i>Brunzha Balaraman, Karl Tillman, Elizabeth Geddes, Tami Mack, Christopher Zachary, Paul Friedman★</i> Dermatology & Laser Surgery Center, Houston, TX; Solta Medical, a Division of Valeant Pharmaceuticals, Bothell, WA; University of California, Irvine Dermatology, Irvine, CA
10:08 AM – 10:14 AM	76	<u>DR. RICHARD E. FITZPATRICK CLINICAL RESEARCH AND INNOVATIONS AWARD RECIPIENT</u> A RANDOMIZED SIDE-BY-SIDE STUDY COMPARING ALEXANDRITE LASER AT DIFFERENT PULSE DURATIONS FOR PORT WINE STAINS <i>Berit C. Carlsen, Emily Wenande★→, Andres Mar Erlendsson, Anne Faurschou, Christine Dierickx, Merete Haedersdal</i> Copenhagen University Hospital, Bispebjerg Copenhagen, Denmark; Skinperium, Boom, Belgium
10:15 AM – 10:21 AM	77	RADIOFREQUENCY ENERGY COMBINED WITH PULSED DYE LASER TO TREAT THOSE SUFFERING FROM RECALCITRANT PORT WINE STAIN <i>Julia Neckman★, Bradley Bloom, Yoon-Soo Cindy Bae, Jeremy Brauer, Roy Geronemus</i> Laser & Skin Surgery Center of New York, New York, NY
10:22 AM – 10:28 AM	78	TREATMENT OF INFANTILE HEMANGIOMAS USING A NOVEL 650-MICROSECOND PULSED Nd:YAG 1064nm LASER <i>David Goldberg★, Gulia Kasimova</i> Skin Laser & Surgery Specialists, Hillsborough, NJ; Laser Medicine and Cosmetic Clinic, Kirov, Russia
10:29 AM – 10:35 AM	LB23	A PROSPECTIVE SELF-CONTROLLED STUDY OF FRACTIONAL CO2 LASER ASSISTED DRUG DELIVERY OF TOPICAL TIMOLOL IN THE TREATMENT OF SUPERFICIAL AND MIXED INFANTILE HEMANGIOMA <i>Gang Ma★, Pinru Wu</i> Cosmetic Laser Center, Shanghai Ninth Peoples Hospital; Jiaotong University, School of Medicine, Shanghai, China
10:36 AM – 11:00 AM		Q & A

7:30 AM – 11:00 AM | ROOM: HYNES 102

Basic Science & Translational Research – Abstract Session

Educational Needs These sessions promote understanding of basic processes of light interaction with tissue and cells, design of light-based diagnostic and therapeutic devices and techniques, and early translation of this knowledge to clinical application.

Participants Scientists, engineers, medical practitioners as well as other healthcare professionals involved in biomedical applications of lasers are invited to attend.

Background Requirements Participants should have a basic understanding or experience of how light interacts with tissues.

Instructional Content/Expected Learning Outcomes These sessions will provide attendees knowledge of cutting-edge advances in optical diagnostics and therapeutics, and their early translation to the clinical management of patients. Novel results are presented that will impact the development of new and more efficacious, light-based diagnostic and therapeutic devices and applications. Characterization of light sources and safety issues are also considered.

“Hot Topics”

- » New Applications of Preclinical/Clinical Therapeutic Technology.
- » Novel Imaging Modalities for Disease Diagnosis.

Chairs Thomas S. Mang, PhD; Serge R. Mordon, PhD

Photobiomodulation

TIME	ABSTR	ACTIVITY
7:30 AM – 7:40 AM	24	LOW-LEVEL LASER IRRADIATION ATTENUATES BETA-AMYLOID-INDUCED NEURODEGENERATION AND FUNCTION DEFICITS IN RAT <i>Yujiao Lu, Ruimin Wang, Timon Cheng-Yi Liu, Quanguang Zhang</i> ★ Medical College of Georgia, Georgia Regent University, Augusta, GA; Neurobiology Institute, Medical Research Center, North China University of Science and Technology, Tangshan, China; Laboratory of Laser Sports Medicine, South China Normal University, Guang Zhou, China
7:41 AM – 7:51 AM	25	LOW-LEVEL LASER THERAPY ON NECROSIS AREA AND HISTOLOGICAL ASPECTS OF MYOCUTANEOUS FLAP IN RATS SUBMITTED TO NICOTINE APPLICATION <i>Kelly Ferreira, Vanessa Tersi, João Garcia, Ivone Silva Duarte</i> ★, <i>Maria Chavantes</i> São Paulo, Brazil
7:52 AM – 8:02 AM	26	A SINGLE LOW-LEVEL LASER APPLICATION REDUCES MYOCARDIAL INFARCTION SIZE, IMPROVES CARDIAC PERFORMANCE AND ATTENUATES APOPTOSIS IN REMOTE MYOCARDIUM <i>Vanessa Grandinetti</i> ★, <i>Juliana Pires, Martha Manchini, Ednei Luis Antônio, Adriana Girard, Luis dos Santos, Paulo de Tarso Camillo de Carvalho, Paulo Tucci, José Antonio Silva Junior, Andrey Serra</i> Nove de Julho University; Federal University; Heart Institute, São Paulo, Brazil
8:03 AM – 8:13 AM	27	PHOTOBIMODULATION EFFECT ON MYOCUTANEOUS FLAP: DIFFERENT DOSE EVALUATION IN NICOTINE RATS <i>João Vitor Garcia, Vanessa Paula Tersi, Brenda Vazamim Cumpri, Ana Brandimarte, Vanessa Alvarenga, Maria Alchore Trivelin, Ivone Silva Duarte</i> ★, <i>Maria Cristina Chavantes</i> São Paulo, Brazil
8:14 AM – 8:24 AM	28	SUPER PULSE THULIUM FIBER LASER FOR LITHOTRIPSY <i>Victoria Zamyatina, Vladimir Minaev, Ilya Yaroslavsky</i> ★, <i>Alexander Kovalenko, Andrei Vinarov, Gregory Altshuler</i> NTO IRE-Polus, Fryazino, Russian Federation; First Medical University, Moscow, Russian Federation; IPG Photonics Corporation, Oxford, MA; IPG Medical Corporation, Marlborough, MA
8:25 AM – 8:45 AM		Q & A

Skin

TIME	ABSTR	ACTIVITY
8:46 AM – 8:56 AM	29	EXPERIMENTAL FEASIBILITY OF HIGH FREQUENCY ULTRASOUND ASSISTED DRUG DELIVERY Michael Slayton★, Paul Jaeger Guided Therapy Systems; Ardent Sound Inc., Mesa, AZ
8:57 AM – 9:07 AM	30	FACILITATION OF TRANSCUTANEOUS DRUG DELIVERY USING A FRACTIONAL LASER AND LIPOSOME TECHNOLOGY Takahiro Fujimoto★, Kazuki Baba, Yuka Oki, Jian Wang, Hideko Kanazawa ClinicF, Chiyoda, Japan; Keio University, Minato, Japan
9:08 AM – 9:18 AM	31	5 W YELLOW-ORANGE COMPACT SEMICONDUCTOR LASER FOR THE TREATMENT OF VASCULAR LESIONS Emmi Kantola★→, Antti Rantamäki, Iiro Leino, Jussi-Pekka Penttinen, Serge Mordon, Mircea Guina Optoelectronics Research Centre, Tampere University of Technology, Tampere, Finland; French Institute of Health and Medical Research (INSERM), Lille, France
9:19 AM – 9:29 AM	32	EFFICACY OF 1-MHZ RADIOFREQUENCY DEVICE FOR FAT BURNING DUE TO INCREASE OF INSULIN Shunji Nakano★ Miyazaki City, Japan
9:30 AM – 9:50 AM		Q & A
9:51 AM – 10:04 AM		BREAK
10:05 AM – 10:15 AM	LB1	MONITORING OF ELECTROCHEMICAL THERAPY USING OPTICAL COHERENCE ELASTOGRAPHY Wesley Moy★, Christian Barnes, Erica Su, Rachel Qu, Zhongping Chen, Brian Wong University of California, Irvine, CA
10:16 AM – 10:26 AM	LB2	STIMULATION OF DENDRITIC CELLS AFTER PHOTOCHEMICAL INTERNALIZATION (PCI), IMPLICATIONS IN CANCER TREATMENT Alejandra Martinez de Pinillos Bayona★, Alexander MacRobert, Michael Hamblin University College, London, UK; The Wellman Center for Photomedicine, Massachusetts General Hospital, Boston, MA; Harvard Medical School; Harvard-MIT Division of Health Sciences and Technology, Cambridge, MA
10:27 AM – 10:37 AM	LB3	PRELIMINARY INVESTIGATION OF TISSUE STIFFENING BY FLUORESCENCE PHOTBLEACHING OF COLLAGEN CROSSLINKS William Lewis★, Juan-Pablo Padilla-Martinez, Antonio Ortega-Martinez, Maura Williams, Walfre Franco Wellman Center for Photomedicine, Boston and Cambridge, MA
10:38 AM – 11:00 AM		Q & A

7:30 AM - 11:00 AM | ROOM: HYNES 104

Biological Imaging – Abstract Session

Educational Needs The purpose of this session is to present and discuss the latest design of light-based diagnostic and imaging devices and their early translation of this knowledge to clinical applications.

Participants Scientists, engineers, medical practitioners, individuals in industry and other health care professionals involved in biomedical applications of light are invited to participate in these sessions.

Background Requirements Participants should have an understanding of light interaction with biological tissues and basic and clinical research.

Instructional Content/Expected Learning Outcomes This session will provide the latest data on biomedical imaging in a wide spectrum of applications. The participants will increase their knowledge on cutting-edge advances in optical imaging and its clinical application.

Chair Ilko Ilev, PhD

Speakers Milind Rajadhyaksha, PhD; Conor L. Evans, PhD; Anna N. Yaroslavsky, PhD; Guillermo J. Tearney, MD, PhD

TIME	ABSTR	ACTIVITY
7:30 AM – 7:35 AM		Introduction – <i>Ilko Ilev</i>
7:36 AM – 7:50 AM		Integrating Advanced Imaging and Approaches in Biophotonics – <i>Ilko Ilev</i>
7:51 AM – 7:56 AM		Q & A
7:57 AM – 8:17 AM		Confocal Imaging to Guide MOHS Surgery and Laser Ablation – <i>Milind Rajadhyaksha</i>
8:18 AM – 8:23 AM		Q & A
8:24 AM – 8:44 AM		Coherent Raman Imaging for the Visualization Normal and Diseased Skin – <i>Conor Evans</i>
8:45 AM – 8:50 AM		Q & A
8:51 AM – 9:06 AM	33	FLUORESCENCE AS A CONTRAST AGENT FOR CONFOCAL INTRA-OPERATIVE IMAGING OF BASAL CELL CARCINOMAS: A PRELIMINARY <i>EX VIVO</i> STUDY <i>Anthony Rossi★, Qiaochu Qi, Hiedy Sierra</i> New York, NY
9:07 AM – 9:12 AM		Q & A
9:13 AM – 9:18 AM		BREAK
9:19 AM – 9:34 AM	34	CORRELATION OF TRANSCUTANEOUS O ₂ MEASUREMENTS WITH NEAR INFRARED SPECTROSCOPY <i>Robert Bowen★, Ginna Treadwell</i> Martinsburg, WV
9:35 AM – 9:39 AM		Q & A
9:40 AM – 9:55 AM	35	RELIABILITY OF CONVENTIONAL TAPE MEASUREMENT vs COMPUTERIZED MEASUREMENT OF WAIST CIRCUMFERENCE: A PILOT STUDY <i>Sara S.L. Fung★, Samantha Y.N. Shek, C.K. Yeung, Johnny C.Y. Chan, Henry H.L. Chan</i> The University of Hong Kong, Central, Hong Kong;
9:56 AM – 10:01 AM		Q & A
10:02 AM – 10:22 AM		Wide-Field High-Resolution Multispectral Polarization Sensitive Reflectance and Fluorescence Imaging – <i>Anna Yaroslavsky</i>
10:23 AM – 10:28 AM		Q & A
10:29 AM – 10:49 AM		Tethered Capsule Endomicroscopy: From Bench to Bedside – <i>Guillermo Tearney</i>
10:50 AM – 11:00 AM		Q & A

11:00 AM - 12:00 PM | ROOM: HYNES AUDITORIUM



SUNDAY, APRIL 3

Luminary Rapid Fire Laser and Energy Pearls - Special Session

Educational Needs This course addresses pearls for treating difficult clinical entities and complications as well as well as optimizing results by combining modalities and new technologies.

Participants This session is directed toward individuals engaged in the use of energy-based devices to treat cosmetic dermatologic concerns.

Background Requirements There are no requirements but experience using energy devices will enhance attendees learning experience.

Instructional Content/Expected Learning Outcomes It is expected attendees will learn not only new pearls for their own cosmetic practice but stimulated to think creatively in their daily clinical practice settings.

Directors David B. Vasily, MD; Elizabeth K. Hale, MD

Faculty Julie Karen, MD; Anne Chapas, MD; Jeremy B. Green, MD; Ron R. Allison, MD; Ashish C. Bhatia, MD, FAAD; Robert A. Weiss, MD

TIME	ACTIVITY
11:00 AM – 11:05 AM	Introduction – <i>David B. Vasily, Elizabeth K. Hale</i>
11:06 AM – 11:11 AM	Pigment: Pearls and Perils – <i>David B. Vasily</i>
11:12 AM – 11:17 AM	Tricks with the Clear & Brilliant – <i>Elizabeth K. Hale</i>
11:18 AM – 11:23 AM	Pearls for Treatment of Vascular Lesions of the Face/Legs – <i>Julie Karen</i>
11:24 AM – 11:29 AM	Pearls for Laser Treatment of Bruising – <i>Anne Chapas</i>
11:30 AM – 11:35 AM	Combining Modalities: Single Session, Optimized Outcomes – <i>Jeremy B. Green</i>
11:36 AM – 11:41 AM	Photodynamic Therapy: Drugs, Lights, Reaction – <i>Ron R. Allison</i>
11:42 AM – 11:47 AM	Pearls for a Great Patient Experience – <i>Ashish C. Bhatia</i>
11:48 AM – 11:53 AM	Pearls and Secret Recipe for Picosecond Photorevitalization – <i>Robert A. Weiss</i>
11:54 AM – 12:00 PM	Conclusion – <i>David B. Vasily, Elizabeth K. Hale</i>

Continuing Education Credits

A statement of CME credit hours will be issued to you on-site and/or following the conference which you can forward to your specialty boards, specialty academies or to your State Medical Examining Boards to meet your continuing education requirements.

ACCME ACCREDITATION STATEMENT

The American Society for Laser Medicine and Surgery, Inc. is accredited by the Accreditation Council for Continuing Medical Education to provide continuing medical education for physicians.

CONTINUING MEDICAL EDUCATION CREDIT

The American Society for Laser Medicine and Surgery, Inc. designates this live activity for a maximum of (number of credits will be determined after the schedule is finalized) AMA PRA Category 1 Credit(s)[™]. Physicians should claim only the credit commensurate with the extent of their participation in the activity.

EDUCATIONAL ACTIVITY	CME CREDIT HOURS	CE CONTACT HOURS*
PRE-CONFERENCE COURSES		
Fundamentals of Lasers in Health Care	8.0	9.5
Expert Treatment Approaches	3.75	4.5
Pediatric Laser Focus	3.75	4.5
Nursing/Allied Health Course	N/A	9.0
Combining Injectables with Lasers, Lights, and Energy-Based Devices	3.75	4.5
Device Based Resurfacing, Rejuvenation and Recontouring	3.75	4.5
MASTERS LUNCHEONS		
Fractional Resurfacing	1.0	1.0
Neck Rejuvenation	1.0	1.0
Our Favorite Laser Pearls	1.0	1.0
PDT: State-of-the-Art	1.0	1.0
State-of-the-Art in Tattoo Treatment	1.0	1.0
What's New in Lasers/Energy-Based Devices	1.0	1.0
MASTERS BREAKFASTS		
Cellulite	1.25	1.5
Optimizing Patient Experience	1.25	1.5
Scar Wars	1.25	1.5
WORKSHOPS		
Safety Compliance in the Practice Environment	2.0	2.0
ASLMS/ALD - Laser Dental Applications Workshop	2.0	2.0
Complications, Legal Issues, and Laser Safety	2.0	2.0
Gynecologic and Cutaneous Therapeutic Challenges and New Treatments	2.0	2.0
Basic Mechanisms of Photobiomodulation	2.0	2.0
Laser Assisted Drug Delivery	2.0	2.0
Non-Invasive Body Contouring Options	2.0	2.0
Periorbital Therapies and Rejuvenation	2.0	2.0

**Professional Medical Education Association is approved by the California Board of Registered Nursing. Provider #CEP 12386. Note: Most State Boards of Nursing accept another State Board's approval for granting credits. Check with the Board of Nursing in your state for clarification. Certificates of Attendance will be provided. You will receive a statement of CE contact hours after the Annual Conference.*

ePosters

Approximately 20 viewing stations will be located in the Exhibit Hall. Attendees will be able to search and view ePosters by author, title, topic, and/or abstract number. No hard copy posters will be on display. There will be ample time during the lunch hours and breaks for viewing. A maximum of four CME credits will be offered for viewing the ePosters. Please find the ePoster information in the packet included in your conference tote bag.

Each ePoster will include a tab labeled "Questions and Answers". When the conference attendee clicks on the Q&A tab, they will view a running list of questions along with each question's corresponding answer from the author. Additionally, there will be a button labeled "Submit a Question". When the conference attendee clicks this button, they will be provided with a form which has a blank area for them to type and submit their question to the author. The system will update every morning at 6:00 AM local time. All questions and answers from the previous day will be posted to each ePoster. Also, the Q&A log will be viewable in the post-conference online version, but the ability to ask questions will not be available in the post-conference online version.

Following the conference, ePosters will be published on the ASLMS website for the remainder of the calendar year and accessible for ASLMS member viewing.

Annual Conference Objectives

EDUCATIONAL NEEDS

The educational needs are to advance the science of laser medicine and surgery, provide better education in the safe and effective clinical use of laser and energy-based devices, involve residents and trainees in laser education, and train non-medical clinical personnel who work in the laser field. Through didactic lectures, abstract sessions, courses, and conversation, the ASLMS Annual Conference instructs attendees on everything from the basic science underpinning clinical applications of lasers, to the most up-to-date research on medical and surgical application of laser technologies, and to their routine practical use in the clinical setting.

DESIGNATED PARTICIPANTS

The designated participants are all those interested in the use of lasers, energy devices, optics, and ancillary fields of surgery and medicine. The ASLMS Annual Conference is not a specialty specific conference but rather technology-specific conference. Physicians attending the conference include dermatologists, plastic surgeons, otolaryngologists, urologists, general surgeons, neurologists, neurosurgeons, cardiologists, cardiac surgeons, oncologists, just to name a few. In addition, attendees from dentistry, veterinary medicine, the nursing and allied health fields, as well as scientists, researchers and industry itself, are all welcome to share information about a variety of topics on lasers.

BACKGROUND REQUIREMENTS

While knowledge of lasers and their use in medicine and surgery is desired, the material presented at the conference is directed at all knowledge levels, including sessions accessible to novices coming to learn about lasers for the very first time.

EXPECTED LEARNING OUTCOMES

Attendees will leave the conference with a better understanding of the latest basic science and clinical research in lasers and energy devices which may lead to novel therapeutic strategies, be better able to select appropriate laser and energy device therapies for specific patient problems, be better able to anticipate, prevent, and manage adverse events associated with clinical laser treatments, and to collaborate with patients to develop treatment plans that meet their physical and emotional needs. Attendees will identify gaps in their knowledge and performance and will use the information presented at the Annual Conference to close those gaps and improve their clinical outcomes and reduce their complications. These learning objectives will be reached by attendance in the fundamentals course, clinical application courses, breakfasts, luncheons, workshops, plenary session, clinical breakout sessions and combined sessions, focus sessions, and ePoster presentations. The multispecialty nature of this conference provides unique opportunities for cross fertilization between specialties that frequently leads to clinical breakthroughs in multiple fields.

CME Mission Statement

The American Society for Laser Medicine and Surgery (ASLMS) is a multi-disciplinary organization whose membership includes representatives from all medical and surgical disciplines, nursing, allied health, dentistry, podiatric medicine, veterinary medicine, industry, research and government.

PURPOSE

ASLMS is dedicated to enhancing the understanding of lasers and the application of laser, light, energy-based and related technologies in biomedicine. The ASLMS is committed to continuous quality improvement and excellence in all of its activities.

TARGET AUDIENCE

The ASLMS is the largest organization of its kind and seeks to enhance dialogue between clinicians, scientists, industry and government through its variety of educational formats. The educational offerings are organized so that whether a novice or an expert, the attendees are provided with useful information.

TYPES OF ACTIVITIES PROVIDED

The ASLMS accomplishes this goal through committee meetings, general sessions, the Annual Conference, educational courses, regional courses and other programs. A variety of educational formats are used including plenary lectures, scientific paper and poster presentations, panel discussions, didactic lectures, and educational courses. The latest information regarding biomedical applications of laser technologies is presented by experts from these fields. The ASLMS also functions as both advocate and advisor to a variety of groups and organizations as well as the Food and Drug Administration. These programs are designed to foster dialogue and discussion between clinicians, scientists, and manufacturers.

CONTENT

Educational programs are designed to enable each participant to select the program and course of learning which best meets individual educational needs while at the same time covering a broad and more balanced range of topics.

EXPECTED RESULTS

Written and verbal evaluations as well as pre-test and post-test results measure the degree to which these educational objectives are met and also provide information used for planning and implementation of future activities. All attendees will have exposure to basic science and clinical laser use in their particular field(s) of interest through their attendance and participation in plenary sessions, focus sessions, specialty breakout sessions, and clinical entity-based courses and panel sessions. The multispecialty nature of ASLMS educational offerings, as well as the spirit of disclosure among scientists and clinicians, provides cross-fertilization between specialties that often leads to breakthroughs in medicine, and facilitates the ability of the participants to fill gaps in their knowledge relative to these technologies and their applications. Specialty-specific courses provide exposure to information of clinical and scientific importance to those practicing in the field. Other content, including but not limited to courses and comprehensive educational activities such as the "Fundamentals of Lasers in Health Care" course and regional courses provide educational tools and will measure the degree to which material has been learned through the use of standardized testing methods. It is expected that participants in these activities will identify gaps in their knowledge, competence, or performance. It is expected that participants will use the knowledge gained to improve their clinical outcomes as a result of their improved understanding of the best practices relative to patient treatment with these technologies, and their safe use.

Approved by the Board of Directors, November 10, 2015

ASLMS Policy on Mechanism to Identify and Resolve Conflict of Interest

The American Society for Laser Medicine and Surgery is The American Society for Laser Medicine and Surgery is accredited by the Accreditation Council for Continuing Medical Education (ACCME). As such, we have made the choice to meet the ACCME's criteria for our practice of continuing medical education. Our accreditation is important to us. We look forward to working together to provide CME at the highest standard.

The ASLMS has implemented a process where everyone who is in a position to control the content of an educational activity must disclose to us all financial relationships with any commercial interest they and their spouse/partner may have received within the last 12 months. Should it be determined that a conflict of interest exists as a result of a financial relationship, it will need to be resolved prior to their involvement. In order to do this, all individuals who are in a position to control the content must complete a disclosure form. If any conflict develops between the time the disclosure form is completed and the educational activity, the individual must notify the ASLMS in writing and disclose the additional conflict of interest. Individuals, who refuse to disclose all financial relationships, will be disqualified from being a part of the planning and implementation of the CME activity.

PROCESS OF IDENTIFYING AND RESOLVING CONFLICT OF INTEREST

Annual Conference (Program Chair, Section Chairs, Speakers)

1. The President selects the Program Chair.
2. A Disclosure of Conflict of Interest "COI" form is completed by the Program Chair(s).
3. If a Program Chair refuses to disclose all financial relationships, he/she will be disqualified from participating in the program.
4. The CME Director reviews the Program Chair disclosure form and completes an Acknowledgement of Disclosure Review form. If it appears that a Program Chair has a COI as a result of a financial relationship, it will need to be resolved in order for the person to serve as Program Chair. If necessary, determination will be made by the CME Director under the guidance of the Board of Directors whether the proposed Program Chair can participate in the program.
5. The Program Chair(s) select Section Chairs.
6. A COI form is completed by each of the Section Chairs.
7. If a Section Chair refuses to disclose all financial relationships, he/she will be disqualified from participating in the program.
8. The CME Director reviews the Section Chair(s) COI forms and completes an Acknowledgement of Disclosure Review form. If it appears that a Section Chair has a COI as a result of a financial relationship, it will need to be resolved in order for the person to serve as Section Chair. If necessary, determination will be made by the Program Chair and CME Director under the guidance of the Board of Directors whether the proposed Section Chair can participate in the program.
9. The Speakers complete the online disclosure form. The Section Chairs review the abstract and Speaker disclosure and complete an Acknowledgement of Disclosure Review form. If it appears that a Speaker has a COI as a result of a financial relationship, it will need to be resolved prior to the activity. If necessary, the Section Chair, Program Chair and CME Director, under the guidance of the Board of Directors, will make the determination whether the proposed Speaker can participate in the program.
10. If any conflict develops between the time the disclosure form is completed and the educational activity, the individual must notify the ASLMS in writing and disclose the additional conflict of interest.
11. The Section Chair and Speaker disclosure information is posted online, provided to attendees via electronic link, included as part of the preliminary (online only) and final programs (online and print copy at conference) and published in the journal.
12. At the Annual Conference:
 - a. Each Section Chair is provided with a checklist of Speakers who are required to disclose COI. The Section Chair is instructed to remind the Speaker to verbally disclose COI prior to their presentation, sign off on the checklist provided, and return the form to the ASLMS.

- b. In addition to a COI statement being posted online, provided via electronic link, and printed in program materials, a COI slide will be prepared by the ASLMS Central Office based on the information provided on the completed disclosure form. The slide will be inserted before each presentation on the Central Server and will include any proprietary interest in any drugs, instruments, or devices discussed in the presentation and/or any compensation received. Similarly, a slide will be shown to disclose the fact that the presentation content includes off-label uses of drugs or devices.
- c. If a Speaker discloses a COI in writing, but does not verbally disclose prior to his/her presentation, the Section Chair will remind the Speaker at the end of the presentation to disclose the COI
- d. If a Speaker does not pre-disclose in writing or verbally, but it becomes apparent that a COI exists, the Section Chair, Program Chair, CME Director and/or Board Member will notify the audience and the speaker of the perceived COI. The speaker will be warned that further failures to comply with policy will result in the speaker's inability to participate in CME related activities of ASLMS in the future. (The Board of Directors may, at its discretion, impose other sanctions it feels are appropriate).
- e. Board members are provided with audit forms and asked to verify if Speakers disclose COI.
- f. Attendees complete evaluation forms and are asked to comment about proper COI disclosure. Evaluation forms are reviewed by the CME Director, Program Chair(s) and Section Chairs after which appropriate corrective action is taken.

Courses (Directors/Faculty)

1. The Program Chair(s) select Course Directors.
2. A Disclosure of Conflict of Interest "COI" form is completed by all Course Directors.
3. If a Course Director refuses to disclose all financial relationships, he/she will be disqualified from participating in the program.
4. The CME Director reviews the Course Director disclosure forms. The CME Director completes an Acknowledgement of Disclosure Review form. If it appears that a Course Director has a COI as a result of a financial relationship, it will need to be resolved in order for the person to serve as Course Director. If necessary, determination will be made by the Program Chair(s) and CME Director under the guidance of the Board of Directors if a proposed Course Director can participate in the program.
5. The Course Director(s) select Faculty.
6. The COI forms are completed by all Faculty
7. If a Faculty Member refuses to disclose all financial relationships, he/she will be disqualified from participating in the program.
8. The Course Director(s) and CME Director review the faculty disclosure forms. Course Director(s) complete an Acknowledgment of Disclosure Review form. If it appears that a Faculty Member has a COI as a result of a financial relationship, it will need to be resolved in order for the person to serve as a Faculty Member. If necessary, determination will be made by the Course Director(s), Program Chair(s), and CME Director under the guidance of the Board of Directors whether the proposed Faculty Member can participate in the program.
9. If any conflict develops between the time the disclosure form is completed and the educational activity, the individual must notify the ASLMS in writing and disclose the additional conflict of interest.
10. Disclosure information is posted online, provided to attendees via electronic link, and printed in the final program.
11. At the conference:
 - a. The Course Director(s) are provided with a checklist of Faculty Members who are required to disclose COI. The Course Director(s) are instructed to remind the Faculty to verbally disclose COI prior to their presentation, sign off on the checklist provided, and return the form to the ASLMS.
 - b. In addition to a COI statement being printed in program materials, a COI slide will be prepared by the ASLMS Central Office based on the information provided on the completed disclosure form. The slide will be inserted before each presentation on the Central Server and will include any proprietary interest in any drugs, instruments, or devices discussed in the presentation and/or any compensation received. Similarly, a slide will be shown to disclose the fact that the presentation content includes off-label uses of drugs or devices.

- c. If a Faculty Member discloses a COI in writing, but does not verbally disclose prior to his/her presentation, the Course Director will remind Faculty at the end of the presentation to disclose COI.
- d. If a Faculty Member does not pre-disclose in writing or verbally, but it becomes apparent that a COI exists, the Course Director, Program Chair, CME Director and/or Board Member will notify the audience and the speaker of the perceived COI. The speaker will be warned that further failures to comply with policy will result in the speaker's inability to participate in CME related activities of ASLMS in the future. (The Board of Directors may, at its discretion, impose other sanctions it feels are appropriate).
- e. Board members are provided with audit forms and asked to verify if Faculty discloses COI.
- f. Attendees complete evaluation forms and are asked to comment about proper COI disclosure. Evaluation forms are reviewed by the CME Director, Program Chair(s) and Course Directors after which appropriate corrective action is taken.

Board of Directors, Members, Officers, Candidates for Office or Committees

In order for the Society to further the purpose for which it is organized and to maintain its reputation for excellence, it is important that Society decisions and actions not be influenced unduly by any special interests or individual members. The Society depends upon its members to shape its policies and the actions of organization policy makers must not be inappropriately affected by outside influences. Accordingly, the Board of Directors of the Society has adopted a formal system for disclosure of interests. Society Board of Directors members, officers, candidates for officer positions and committee members must complete and submit a Disclosure of Interest Statement.

1. Members of the ASLMS Board of Directors are required to complete the Disclosure of Interest Statement, annually. Copies of the completed disclosure forms will be included in each Board agenda, posted on the ASLMS website, and available at the ASLMS Central Office upon request.
2. The Disclosure of interests shall include personal interests, interests as director, officer, member, stockholder, shareholder, partner, manager, academic mentor, consultant, employee, researcher, grantee, lobbyist, trustee or beneficiary of any concern and having an immediate family member who holds such an interest in any concern.
3. The disclosure shall list "concerns" which include any corporation, association, joint venture, trust, partnership, limited liability entity, firm, institution, governmental body, endeavor, other entity other than the Society or person.
4. In addition to completing the Disclosure of Interest Statement the discloser has an obligation to advise the Society of any interest of the discloser that is or potentially is in conflict with any interest of the Society as the discloser becomes aware of the conflict of interest or potential conflict of interest.
5. The discloser acknowledges that as a director, officer, candidate for office or committee member of the American Society for Laser Medicine and Surgery, Inc., he/she occupies or seeks a position of trust with a fiduciary duty to act at all times in good faith and with loyalty to the Society.
6. The discloser further acknowledges having received, read and understood the Society's Disclosure of Interest Policy, and that he/she agrees to comply with it.
7. The discloser certifies that, all of the interests as defined in the Policy have been disclosed to the best of his/her knowledge.
8. The Secretary of the Society is charged with the responsibility to monitor potential conflict of interest and bring it to the attention of the Board.
9. All Board Members are expected to verbally disclose conflicts of interest with any pertinent item on the agenda and recuse themselves from discussion and voting, including additional topics that may arise.

Approved by the Board of Directors, November 10, 2015

ASLMS Learners Bill of Rights

The American Society for Laser Medicine and Surgery, Inc. (ASLMS) recognizes that you are a life-long learner who has chosen to engage in continuing medical education to identify or fill a gap in knowledge, skill, or performance. As part of ASLMS' duty to you as a learner, you have the right to expect that your continuing medical education experience with ASLMS includes:

CONTENT THAT:

- » promotes improvements or quality in health care;
- » is valid, reliable, and accurate;
- » offers balanced presentations that are free of commercial bias for or against a product/service;
- » is vetted through a process that resolves any conflicts of interests of planners, teachers, or authors;
- » is driven and based on learning needs, not commercial interests;
- » addresses the stated objectives or purpose; and
- » is evaluated for its effectiveness in meeting the identified educational need.

A LEARNING ENVIRONMENT THAT:

- » supports learners' ability to meet their individual needs;
- » respects and attends to any special needs of the learners;
- » respects the diversity of groups of learners; and
- » is free of promotional, commercial, and/or sales activities.

DISCLOSURE OF:

- » relevant financial relationships planners, teachers, and authors have with commercial interests related to the content of the activity; and
- » commercial support (funding or in-kind resources) of the activity.

Name	Page #	Disclosure
Absten, Gregory	22	No Disclosure
Alabdulrazzaq, Hamad	50, 135	No Disclosure
Alam, Murad	24	Received grant funding and equipment from Amway
Alchorne Trivelin, Maria Laura	90	No Disclosure
Aldahan, Adam	See Supplement	No Disclosure
Alexiades, Macrene	31, 42, 46, 56, 63	Received grant funding for clinical studies from DEKA, DUSA, Lancome, Serene, Syneron-Candela
Alinsod, Red	42, 63, 79, 80	Received equipment from Cooper Surgical, Thermi; Received discount from Ellman International, Monarch Medical Products; Received consulting fees from and Served on Advisory Board for Coloplast, Thermi; Travel expenses paid by Coloplast, Ellman International, Thermi; Received royalties from Cooper Surgical, Monarch Medical Products, Thermi; Holds ownership interest with Caldera Medical, Thermi; Holds intellectual property rights with Caldera Medical, Cooper Surgical, Thermi
Al-Jewair, Thikriat	See Supplement	No Disclosure
Allison, Ron	3, 7, 16, 43, 46, 93	No Disclosure
Al-Muzaini, Hanan	62	No Disclosure
Al-Omar, Esam	61	No Disclosure
Alster, Tina	4, 30, 51, 56, 72, 78	Received grant funding from Cynosure; Received equipment, discount and served on the Advisory Board for Merz; Received consulting fees from Home Skinovations
Alvarenga Bezerra, Vanessa	90	No Disclosure
Alvarenga, Leticia	See Supplement	No Disclosure
Alves, Agnelo	77	No Disclosure
Amann, Philipp	See Supplement	No Disclosure
Anand, Rohan	83	No Disclosure
Anders, Juanita	18, 53, 54, 56, 57, 76	Received grant funding and CRADA between USUHS and Lite Cure, Lumithera; Received equipment from B&W Tek, Irradia, LiteCure, Nitto Denko, PhotoThera; Travel expenses paid by Companion Animal LLC, Lite Cure; Received royalties from Banyon Biomarkers, PhotoThera; Holds intellectual property rights with Henry M Jackson Foundation; Serves on Advisory Board for Companion Animal LLC, Lite Cure LLC, Lumithera Inc.; Served as Officer or Director for ASLMS
Anderson, R. Rox	25, 48, 65, 73, 87	Received grant funding from Zeltiq; Received equipment from Syneron-Candela, Zeltiq; Received consulting fees from Amway, Cytrellis, Photomedex, Seventh Sense; Travel expenses paid by Amway, Photomedex, Seven Oaks; Received salary, royalties and holds intellectual property rights with Massachusetts General Hospital; Holds ownership interest with Cytrellis, Living Proof, Photomedex, Seven Oaks; Served on the Advisory Board for Amway, Cytrellis, Seventh Sense
Antonio, Ednei	77, 90	No Disclosure
Anvari, Bahman	49	No Disclosure
Arana-Chavez, Victor	See Supplement	No Disclosure
Arndt, Kenneth	7, 24, 51	Holds ownership interest with PhotoMedex, Solta
Arron, Sarah	84	Received salary From Allergan, Anacor, Genentech, Kythera, Lilly, Novartis; Holds ownership interest with Genentech; Served on Advisory Board for Leo Pharma
Arshad, Hassan	67, 68	No Disclosure
Assumpção, Bianca	67, 79	No Disclosure
Au, Sonoa	84	No Disclosure
Avram, Mathew	6, 41, 55, 65, 84, 88	Received equipment from Cutera; Receiving consulting fees from Zeltiq Aesthetics, Kythera, Allergan, Galderma, Sciton, Zalea; Holds ownership interests from Cytrellis, Zalea, Masters of Aesthetics San Diego; Holds intellectual property rights from Cytrellis; Served on Advisory Board from Sciton, Zalea, Zeltiq

Name	Page #	Disclosure
Ayad, Tareck	61	No Disclosure
Azais, Henri	68	No Disclosure
Baba, Kazuki	91	No Disclosure
Bae, Jung Min	See Supplement	No Disclosure
Bae, Yoon-Soo Cindy	50, 55, 72, 87, 89	Received consulting fees from Allergan, Biospecifics, Kythera
Baggish, Michael	42, 63	No Disclosure
Bagnato, Vanderlei	67, 81	No Disclosure
Bailey, John	See Supplement	No Disclosure
Balaraman, Brundha	89	No Disclosure
Banashek, Valory	83	No Disclosure
Bangash, Haider	85	No Disclosure
Banh, Marian	83	No Disclosure
Banzhaf, Christina	8, 9, 83	No Disclosure
Barolet, Daniel	53	No Disclosure
Baron, Jens	See Supplement	No Disclosure
Barroso, Juliana	See Supplement	No Disclosure
Basnett, Andrew	84	No Disclosure
Bass, Lawrence	71	Received grant funding and travel expenses from Cynosure; Received consulting fees from Cynosure and Neothetics; Served on Advisory Board for Allergan, Kythera, Merz; and Served on Promotional Speakers Bureau for Cynosure
Bassil, Alfred	68	No Disclosure
Baumann, Molly	See Supplement	No Disclosure
Baumeister, Philipp	See Supplement	No Disclosure
Bay, Christiane	49, 81, 83	No Disclosure
Beasley, Karen	71	Received honoraria for educational services from Kythera
Beaudette, Kathy	61	No Disclosure
Bellnier, David	81	No Disclosure
Belo, Victoria	51, 88	No Disclosure
Belotto, Renata	56, 67, 79	No Disclosure
Benboujja, Fouzi	61	No Disclosure
Bernstein, Eric	51	Received grant funding and consulting fees from Syneron-Candela; Received discount from Syneron-Candela, Zeltiq; Holds ownership interest in Tria Beauty; Served on Advisory Board for Novoxel, Solta and Syneron-Candela
Betrouni, Nacim	47, 68, 79	No Disclosure
Betz, Christian	18, 61, 62	No Disclosure
Betz, Tom	61	No Disclosure
Bhatia, Ashish	3, 7, 16, 37, 43, 72, 86, 93	Received consulting fees from Aclaris, Allergan, BioMarck, Celgene, Cutera, Ethicon, KCI Inc, Kythera Biopharm, Mentor Inc., Merz, Suneva Medical, Valeant; Travel Expenses paid by Allergan, BioMarck, Celgene, Cutera, Envy Medical, Galderma, Genzum, Merz, Suneva, Valeant; Honoraria or gifts for educational services from Aclaris, Allergan, Celgene, Cutera, Galderma, Paradigm, Suneva Medical, Valeant; Holds Ownership Interest with BioMarck, Derm.md, Genzum, SimSkin, Theravant; Served on Advisory Board for Allergan, BioMarck, Derm Education Foundation, Derm.md, Envy Medical, Galderma, Theravant; Served on Speakers Bureau for Aclaris, Allergan, Celgene, Galderma, KCI Inc, Merz; Served as Officer or Director for Board of Directors-American Society for Dermatologic Surgery, BioMarck, Envy Medical

Name	Page #	Disclosure
Biesman, Brian	17, 41, 60, 71	Received discount from Zimmer; Received consulting fees from Allergan, Galderma, Kythera, Living Proof, Merz, Myoscience, Revance, Syneron-Candela, Tria Beauty, Valeant, Zeltiq; Travel expenses paid by Living Proof, Tria Beauty, Valeant; Received honoraria or gifts for educational services from Allergan, Syneron-Candela, Valeant; Holds ownership interest with Cytrellis, On Light Science; Served on Advisory Board for Cytrellis, Valeant, Zeltiq; Served on Promotional Speakers Bureau for Allergan, Merz, Syneron-Candela, Valeant; Received grants/research support from Allergan, Evolus, Kythera, Merz, Myoscience, OnLight Science, Revance, Syneron-Candela, Zeltiq
Biron, Julie	See Supplement	No Disclosure
Bizjak Ogrinc, Urska	56, 79	Travel expenses paid by and received honoraria for educational services from Fotona
Blackstone, Britani	See Supplement	No Disclosure
Blanco, Kate	81	No Disclosure
Bloom, Bradley	17, 50, 72, 83, 87, 88, 89	Received equipment from Aerolase; Received consulting fees and honoraria or gifts for educational services from Cutera; Holds stock options and serves on Advisory Board for Aerolase; and Served on Promotional Speakers Bureau for Cutera
Bloom, Jason	60	Received discount from ThermiAesthetics; Received consulting fees from Allergan, Alma Lasers, Galderma, Kythera, Merz, Pharmaceutical Project Solutions, ThermiAesthetics; Travel expenses paid by Allergan, Galderma, Kythera, Merz, ThermiAesthetics; Served on Advisory Board for Galderma, Merz; Served on promotional speakers bureau for Allergan, Alma Lasers, Galderma, Kythera, Merz, ThermiAesthetics
Bootz, Friedrich	74	No Disclosure
Bortoletto, Carolina	74	No Disclosure
Botchkareva, Natasha	83, 84	No Disclosure
Bowe, Whitney	37	Received consulting fees from Allergan, Cosmetic Dermatology Inc, Galderma, Merz; Received honoraria or gifts for educational services from Energizer Holdings, Pacific World Corporation, Sunstar Americas; Served on Advisory Board for Cosmetic Dermatology Inc, Galderma
Braga, Joao	44	No Disclosure
Braga, Tarcio	76	No Disclosure
Brandi, Hugo	80	No Disclosure
Brandimarte, Ana Carolina	90	No Disclosure
Brauer, Jeremy	50, 51, 55, 72, 87, 89	Received honoraria or gifts for educational services from Cynosure; and Served on Advisory Board for Cynosure
Briars, Emma	68	No Disclosure
Brochado Martins, João	44	No Disclosure
Brown, Megan	84	No Disclosure
Bulin, Anne-Laure	68	No Disclosure
Burchman, Mel	16, 40, 44	No Disclosure
Burns, A. Jay	28, 35, 71	Received grant funding and discounts form Zeltiq; Received equipment from Medi-Spa, Merz, Sciton, Zeltiq, Zimmer; Received consulting fees from Sciton, Skin Spa, Zeltiq; Travel expenses paid by Sciton, Zeltiq; Served on Advisory Board for Cellfina, Mira-Dry, Sciton, Zeltiq
Busch, Theresa	67, 68	No Disclosure
Buscone, Serena	83, 84	Received grant funding, travel expenses paid by and received salary from EU commission funded Marie Curie Actions Grant
Bussadori, Sandra Kalil	53, 74, 77	No Disclosure
Camara, Niels	76	No Disclosure
Campos, Gabriela	See Supplement	No Disclosure
Caramelo, Francisco	44	No Disclosure
Carbinatto, Fernanda	67, 81	No Disclosure

Name	Page #	Disclosure
Carlsen, Berit	89	No Disclosure
Carpentier, Olivier	79	No Disclosure
Casabona, Gabriela	34	Received honoraria for educational services from Allergan, Merz
Cassoni, Alessandra	45	No Disclosure
Castellano, Irene	84	No Disclosure
Castellanos, Marisol	83	No Disclosure
Celli, Jonathan	68, 81	No Disclosure
Chan, Henry Hin Lee	7, 24, 25, 33, 50, 51, 55, 72, 92	Received grant funding from Quanta System - Italy; Received equipment from Cynosure, Lumenis - Israel, Quanta System-Italy, Syneron Medical; Received discount from Cutera, Cynosure, Lumenis-Israel, Merz, Syneron Medical; Received consulting fees from Access Business Group International, Basis Medical Technologies-Canada, Cutera; Received a free loan from Quanta System Italy; Received royalties from McGraw-Hill Companies; Received honoraria from Syneron-Candela, Zeltiq; Holds ownership interest with Basis Medical Technologies-Canada, Cytrellis Biosystems, Lumenis-Israel, Syneron-Candela; Holds intellectual property rights and served as an Officer or Director for Blossom Innovation; Served on Advisory Board for Lumenis-Israel, Syneron-Candela; Received fees to conduct trial/support conduct clinical trial from Cynosure, Merz, Quanta System-Italy, Syneron-Candela, Zeltiq
Chang, Yin Shuo	69	No Disclosure
Chapas, Anne	27, 93	Received financial grant from Myoscience, Restorsea, Watson; Received equipment from Cutera; Received discount from DUSA, Medicis; Received consulting fees from Allergan, Kythera, Pfizer, Syneron-Candela, Therapeutics, Valeant; Served on Advisory Board for Valeant; Served on Promotional Speakers Bureau DUSA, Medicis
Chavantes, M. Cristina	54, 56, 77, 79, 90	No Disclosure
Chawla, Kirti	See Supplement	No Disclosure
Chen, Bo	71	Received equipment, travel expenses paid by, received salary and holds ownership interest with Cynosure
Cheng, Carol	84	No Disclosure
Cherubini, Giulio	54, 75	No Disclosure
Chhabra, Chiranjiv	72	No Disclosure
Chilukuri, Suneel	66	Received consulting fees and honoraria for educational services from Allergan, Cynosure, Galderma, PCA, Skin Medica, Travel expenses paid by and served on the Advisory Board for Allergan, Galderma, PCA and Skin Medica
Chin-Hong, Peter	84	No Disclosure
Chitgopeker, Pooja	84	No Disclosure
Cho, Min-Jeong	73	No Disclosure
Cho, Seong Eun	See Supplement	No Disclosure
Choi, Bernard	49	Received grant funding from Air Force Office of Scientific Research, National Institutes of Health; Received salary from University of California Irvine; Holds ownership interest in National Instruments
Choi, Juliana	84	No Disclosure
Civiok, Jennifer	26	No Disclosure
Clark, Jason	87	No Disclosure
Clark, Patrick	39	No Disclosure
Cohen, Joel	41, 60, 72	Received financial grant from Allergan, Galderma, Kythera, Leo, Merz, Syneron-Candela, Valeant; Received equipment from Syneron-Candela; Received consulting fees from Allergan, DUSA, Galderma, Kythera, L'Oréal, Merz, Valeant; Served on Promotional Speakers Bureau for Sciton
Coleman, William	72	Received consulting fees from, Travel expenses paid by, Holds ownership interest with and Served on Advisory Board for Miramar
Collinet, Pierre	68	No Disclosure

Name	Page #	Disclosure
Colombo Zeidan, Leonardo	45	No Disclosure
Coracin, Fabio Luiz	See Supplement	No Disclosure
Cormack, Gregory	53	No Disclosure
Corradini, Katie	27	No Disclosure
Costa-Rodrigues, Joao	53	No Disclosure
Cramer, Gwendolyn	68	No Disclosure
Crossing, Tascha	85	No Disclosure
Cuckov, Filip	81	No Disclosure
Cuerda, Esther	See Supplement	No Disclosure
Curtis, Julia	85	No Disclosure
Dai, Tianhong	68	No Disclosure
Darbar, Arun	44	Received equipment from Elexxion, Zolar; Travel expenses paid by AGD
Darbar, Rita	44	Received equipment from Elexxion, Zolar; Travel expenses paid by AGD
De Angelis, Katia	77	No Disclosure
de Carvalho, Paulo de Tarso	77, 90	No Disclosure
De Feraudy, Sebastien	49, 85	No Disclosure
De Montigny, Etienne	61	No Disclosure
de Paula Tersi, Vanessa	See Supplement	No Disclosure
Deal, R. Chad	79	Travel expenses paid by and Received honoraria for educational services from Sciton
Deana, Alessandro	68, 74, 76, 84	No Disclosure
DePina, Joaquina	51	No Disclosure
Desai, Shraddha	51, 66	No Disclosure
Dias, Elisabete	See Supplement	No Disclosure
Dias, Victoria	See Supplement	No Disclosure
DiBernardo, Barry	55	Received grant funding from Cynosure, Suneva; Received equipment from Cynosure, Zwave; Received discount from Cynosure; Received consulting fees from Cutera, Cynosure, Thermi; Received royalties from Elsevier; Received honoraria from and served on the Speakers Bureau for Cutera, Cynosure, Merz, Thermi; Holds ownership interest in Real Self, Thermi; Served on Advisory Board for Cynosure, Merz; Served as Officer or Director for Premier
Dierickx, Christine	6, 35, 50, 52, 89	Received financial grant from Alma, Galderma, Pantec; Received equipment from Chromogenex, Cynosure, Lumenis, Lutronic, Merz, Syneron-Candela; Received consulting fees from Galderma, Merz; Served on Advisory Board for Merz, Zeltiq
DiGiorgio, Catherine	84	No Disclosure
Doherty, Sean	26, 71	Received equipment from and served as Director for Cynosure; Travel expenses paid by, served on Advisory Board and Speakers Bureau for Allergan
Donaldson, Cortney	85	Received consulting fees from and Holds ownership interest with ZALEA
Doran, Michelle	26	No Disclosure
Dorizas, Andrew	70, 89	No Disclosure

Name	Page #	Disclosure
Dover, Jeffrey	7, 30, 37, 51, 58	Received grant funding from Allergan, Cutera, Cynosure, Kythera, Lumenis, Merz, Revance, Sebacia, Shaser, Solta, Suneva, Syneron-Candela, Valeant, Zeltiq; Received equipment from Cynosure, Lumenis, Syneron-Candela; Received consulting fees from Cynosure, Solta, Valeant, Zeltiq; Received royalties from CVS, Elsevier; Received honoraria from Allergan, Cutera, Cynosure, Kythera, Revance, Solta, Syneron-Candela, Topokine, Valeant, Zeltiq; Holds ownership interest in and Served as Director and Sponsor of Controversies and Conversations in Laser and Cosmetic Surgery Advanced Symposium; Holds intellectual property rights with Shaser; Served on Advisory Board for Allergan, Cutera, Cynosure, Kythera, Lumenis, Revance, Shaser, Solta, Suneva, Topokine, Valeant, Zeltiq; Served as series editor of Procedures in Cosmetic Dermatology published by Elsevier
Duarte, Ivone	77, 90	No Disclosure
Duncan, Diane	56, 59	No Disclosure
Dupont, Clément	47, 68	No Disclosure
Dymov, Alim	See Supplement	No Disclosure
Edward, Kert	69	No Disclosure
El Hamidi, Hamid	68	No Disclosure
Elford, Erica	See Supplement	Received salary from Sciton
Elkins, Kristen	85	No Disclosure
Enamandram, Monica	85	No Disclosure
Englhard, Anna Sophie	61	No Disclosure
Enikeev, Dmitry	See Supplement	No Disclosure
Erlendsson, Andres	58, 73, 89	No Disclosure
Eubanks, Stephen	53, 85	No Disclosure
Eugenio, Cecilia	82	No Disclosure
Evans, Conor	92	No Disclosure
Eviatar, Joseph	60	No Disclosure
Faria-Almeida, Ricardo	44	No Disclosure
Faurschou, Annesofie	89	No Disclosure
Felicio, Axelle	62	No Disclosure
Felino, António	44	No Disclosure
Feng, Xu	69	No Disclosure
Ferguson, Nkanyezi	84	No Disclosure
Fernandes, Kristianne	53, 77, 84	No Disclosure
Fernandes, Maria	53	No Disclosure
Fornaini, Carlo	45, 48	No Disclosure
Franca, Cristiane	84	No Disclosure
Francis, Nathan	83	No Disclosure
Franco, Walfre	69, 70, 74, 91	No Disclosure
Freitas, Lucas	See Supplement	No Disclosure
Friedman, David	50	No Disclosure
Friedman, Paul	8, 35, 55, 85, 89	Received grant funding from Solta; Received equipment, consulting fees and Served on Advisory Board for Valeant
Friedmann, Daniel	59, 66	Received financial grant from Zeltiq; Received equipment from Illumitex; Lumenis; Received consulting fees, travel expenses paid by and received honoraria for educational services from Kythera, Merz; Served on Advisory Board for Aclaris Therapeutics; Served on Promotional Speakers Bureau for Merz
Frochot, Céline	68	No Disclosure
Fujimoto, Takahiro	91	No Disclosure

Name	Page #	Disclosure
Fung, Sara SL	92	No Disclosure
Furubayashi, Gen	See Supplement	No Disclosure
Gambacciani, Marco	80	Received grant funding and honoraria for educational services from Fotona
Garcia, João	90	No Disclosure
Garcia, Mónica	53	No Disclosure
Garden, Jerome	24, 72, 88	Received grant funding from Syneron-Candela; Received equipment from Alma, Biosystems, Syneron-Candela, Zeltiq; Received discount from Cutera, Cynosure, Solta; Received honoraria for educational services from Cynosure; Holds ownership interest in Skinovations
Gaspar, Adrian	80	Travel expenses paid by and received honoraria for educational services from Fotona
Gauglitz, Gerd	See Supplement	No Disclosure
Gaviria, Jorge	80	No Disclosure
Gazote Eloy Geraldo, Yhago	See Supplement	No Disclosure
Geddes, Elizabeth	18, 83, 85, 89	No Disclosure
Geraghty, Laurel	See Supplement	No Disclosure
Geronemus, Roy	24, 25, 27, 50, 51, 55, 72, 87, 89	No Disclosure
Ginsberg, David	84	No Disclosure
Girardi, Adriana	77	No Disclosure
Giusti, Andre Luiz	81	No Disclosure
Godine, Richard	18, 64	No Disclosure
Gold, Michael	See Supplement	No Disclosure
Goldberg, David	7, 88, 89	Received consulting fees and honoraria for educational services from Cutera, DEKA; Received discount from Sciton; Served on Promotional Speakers Bureau for Cutera
Goldberg, Gerald	22, 23	Received equipment from, travel expenses paid by, received honoraria from, and served on the Speakers Bureau for Syneron-Candela; Received discount from Cutera, Cynosure, DEKA, Syneron-Candela; Received consulting fees from Con-Bio, Syneron-Candela
Goldman, Mitchel	7, 35, 55	Received grant funding from Merz, Solta, Syneron-Candela; Received discount from Lumenis, Merz, Solta, Syneron-Candela; Received consulting fees, travel expenses paid by, and received honoraria for educational services from Lumenis
Gollnick, Sandra	67, 68	No Disclosure
Gomes, Mariana	See Supplement	No Disclosure
Gomez, Valentin	80	No Disclosure
Gonçalves, Marcela Leticia Leal	84	No Disclosure
Goo, Boncheol	48, 70, 75, 81	Received grant funding from Ministry of Industry, Ministry of Health and Welfare - Korea; Received consulting fees, salary, royalties, holds ownership interest in, has intellectual property rights with and served as an Officer or Director for Lutronic
Grandinetti, Vanessa	90	No Disclosure
Green, Jeremy	3, 7, 16, 36, 43, 72, 93	Received grant funding for research from Allergan, Alphaeon, Cutera, Kythera, Merz, Neothetics, Revance, Valeant; Served on Advisory Board for Allergan, Galderma, Lutronic, Merz, Valeant; Served on Promotional Speakers Bureau for Allergan, Cutera, Kythera, Lutronic, Merz
Greene, Mona	26	Received salary from BTL, Lutronic, PeoCell Therapies
Grundfest, Warren	83	No Disclosure
Guardão, Maria Luísa	44	No Disclosure
Guedes, Guelton	See Supplement	No Disclosure
Guerra, Fernando	44	No Disclosure

Name	Page #	Disclosure
Guertler, Anne	See Supplement	No Disclosure
Guina, Mircea	91	No Disclosure
Gutierrez-Herrera, Enoch	77	No Disclosure
Haack, Mareike	See Supplement	No Disclosure
Haak, Christina S	48	No Disclosure
Haedersdal, Merete	35, 46, 48, 49, 58, 67, 70, 73, 81, 83, 89	Received financial grant from Almirall, Galderma, Leo Pharma, Lumenis, Lutronic, Procter & Gamble, Sciton, Sebacia; Received equipment from GME (German Medical Engineering), Syneron-Candela; Received consulting fees from Galderma Nordic
Haimovic, Adele	87	No Disclosure
Hale, Elizabeth	93	No Disclosure
Hall, Richard	54	No Disclosure
Hallac, Rami	73	No Disclosure
Halvorson, Christian	71, 88	No Disclosure
Hamann, Carolyn	51	No Disclosure
Hamblin, Michael	68, 91	Received financial grant from PhotoThera; Received equipment from Irradia, PhotoThera; Received discount and consulting fees from Transdermal Cap; Travel expenses paid by Germext, Transdermal Cap; Served on Advisory Board for Hologenix, Transdermal Cap
Hammer, Christian	See Supplement	No Disclosure
Hannibal, Jens	48	No Disclosure
Hasan, Tayyaba	67, 68, 81	No Disclosure
Heise, Ruth	See Supplement	No Disclosure
Hempstead, Josh	81	No Disclosure
Hernandez, Shannon	27	No Disclosure
Hibler, Brian	84	No Disclosure
Hirschberg, Ronald	64	No Disclosure
Ho, Derek	84	No Disclosure
Hoffmann, Klaus	36	Received equipment from Cynosure, Revlite; Received discount from and Travel expenses paid by Cutera, Cynosure; Received honoraria for educational services from Allergan, Cutera, Cynosure, Kythera, Zeltiq ; Served on Advisory Board for Kythera
Holanda, Vanessa	18, 53, 54, 76	No Disclosure
Hölzle, Frank	See Supplement	No Disclosure
Honeybrook, Adam	85	No Disclosure
Honma, Kiyonobu	68	No Disclosure
Hoogedoorn, Lisa	See Supplement	No Disclosure
Hooper, David	68	No Disclosure
Hoopman, John	26	Received grant funding from Sciton; Received consulting fees and honoraria from Cutera, Sciton
Horowitz, Gary	49	No Disclosure
Howell, Tyger	81	No Disclosure
Ibrahimi, Omar	85, 88	Received financial grant from Living Proof, Lumenis, Lutronic; Received equipment from Lumenis, Lutronic; Received discount from, travel expenses paid by, salary from and served on Advisory Board for Lutronic; Received consulting fees from Kythera, Procter & Gamble, Zeltiq; Holds ownership interest with Kythera, Neoethics, Zeltiq
Iglesia, Cheryl	63	No Disclosure
Ilev, Ilko	17, 92	No Disclosure
Inada, Natalia	67, 81	No Disclosure

Name	Page #	Disclosure
Itai, Koji	See Supplement	No Disclosure
Jacob, Carolyn	24	Received consulting fees from Abbvie, Galderma, Medics/Valeant, Miramar; Received honoraria from Abbvie, Galderma, Valeant; Served on Advisory Board for Miramar; Served on Speakers Bureau for Abbvie, Galderma, Miramar, Valeant
Jafari, Seyedehrojin	68	No Disclosure
Javed, Muhammad Umair	85	No Disclosure
Jenkins, Faye	26, 27	No Disclosure
Jensen, J. Daniel	See Supplement	No Disclosure
Jimenez Gomez, Natalia	See Supplement	No Disclosure
Jogi, Medhavi	See Supplement	No Disclosure
Johnson, Douglas	18, 75	Travel expenses paid by, received salary from, and holds ownership interest with Multi Radiance Medical; Served on Advisory Board for North American Association for Photobiomodulation Therapy
Kaminer, Michael	55, 72	Received financial grant from Cellfina, Cytrelis, Miramar, Zeltiq; Received honoraria for educational services from and holds ownership interest with Miramar, Zeltiq; Served on Advisory Board for Cytrelis, Miramar, Zeltiq
Kanazawa, Hideko	91	No Disclosure
Kane, Alex	73	No Disclosure
Kantola, Emmi	91	No Disclosure
Kaplan, Martin	40	No Disclosure
Karakullukcu, Baris	81	No Disclosure
Karen, Julie	93	No Disclosure
Karlsson, Erlendur	73	No Disclosure
Karmisholt, Katrine	See Supplement	Received grant funding from Lumenis
Karram, Mickey	5, 43, 63, 79, 80	Received consulting fees and served on Advisory Board for AMS, Cynosure, Medtronic; Travel expenses paid by, received honoraria from and served on Speakers Bureau for AMS, Astellas, Cynosure, Medtronic; Received royalties and holds intellectual property rights with Emedsco
Katz, Bruce	59, 66, 71	Received financial grant from Cynosure; Received equipment from Allergan, Alma, Cynosure, Merz, Valeant; Received consulting fees from and served on Advisory Board for Allergan, Merz, Valeant; Received honoraria for educational services from Allergan, Cynosure, Merz, Valeant; Served on Advisory Board for Allergan, Merz, Valeant
Kauvar, Arielle	24, 35, 51	Received grant funding from Syneron-Candela; Served on Advisory Board for Sebacia
Kawa, Nisrine	See Supplement	No Disclosure
Keaney, Terrence	17, 34, 71	Received equipment from Syneron-Candela; Received consulting fees from Allergan, Skinceuticals, Syneron-Candela, Unilever; Received honoraria from Allergan, Skinceuticals, Syneron-Candela; Served on Advisory Board for Allergan
Kelly, Kristen	25, 49, 56, 85	Received financial grant from Nitto Denko; Received equipment from Light Sciences Oncology, Syneron-Candela; Consulting fees received from MundiPharma, Pierre Fabre
Kennedy, Victoria Reggie	56	No Disclosure
Khan, Amjad	68, 81	No Disclosure
Khatri, Khalil	26	Received equipment from Aerolase, BTL; Travel expenses paid by, served on Advisory Board and Speakers Bureau for Aerolase
Khetarpal, Shilpi	51	No Disclosure
Kilmer, Suzanne	24, 28, 35, 51, 55, 71, 72, 88	Received financial grant from Allergan, Cynosure, Lumenis, Merz, Miramar, Sebacia, Sienna Labs, Solta/Valeant, Zeltiq; Received consulting fees from Allergan, Galderma; Travel expenses paid by Solta, Zeltiq; Served on Advisory Board for Lumenis, Miramar, Sebacia, Sienna Labs, Syneron-Candela, Zeltiq, Zift
Kim, Dong Jin	See Supplement	No Disclosure

FACULTY & SPEAKER DISCLOSURES

Name	Page #	Disclosure
Kim, Min Sung	See Supplement	No Disclosure
Kim, Yoon Soo	See Supplement	No Disclosure
Kinney, Brian	55	Received consulting fees from Kythera, Merz, Sientra, ThermiAesthetic; Travel expenses paid by and holds ownership interest in Advanced Aesthetic Technology, ThermiAesthetic; Received royalties from Elsevier; Served on Advisory Board for ASPS
Knox, Amanda	51	No Disclosure
Kochevar, Irene	69	No Disclosure
Koh, Wooseok	67	No Disclosure
Kono, Taro	50, 51	Received equipment from Cynosure, Syneron-Candela; Served on Advisory Board for Syneron-Candela
Koo, Eugene	49, 53	No Disclosure
Korosec, Branka	80	No Disclosure
Kovacs, Katalin	64	No Disclosure
Kovalenko, Anastasiia	90	Received salary from NTO IRE-Polus
Kraeva, Ekaterina	49, 86	No Disclosure
Krakowski, Andrew	24, 25, 38, 55, 84	No Disclosure
Kruter, Laura	51, 66	No Disclosure
Kuan, Edward	8, 83	No Disclosure
Kuo, Karen	83	No Disclosure
Kwon, Hyuck Hoon	86	No Disclosure
Kwon, Ohsang	67	No Disclosure
Kwong, Bernice	83	No Disclosure
Laffers, Wiebke	74	No Disclosure
Lalji, Shelena	See Supplement	No Disclosure
Lang, Patrick	80	No Disclosure
Langelier, Nicole	85	No Disclosure
Lanzafame, Raymond	16, 39, 57	Received grant funding from Apira Science; Received equipment from Apira Science, ImArcSys; Received consulting fees from Apira Science, Coleman Research Group, GLG Councils, Leerink Swan, Merz; Travel expenses paid by ASLMS, Society of Laparoendoscopic Surgeons (i.e. Reimbursement for Board of Directors', course faculty, and/or CME Director activities at programs for both ASLMS and SLS); Holds intellectual property rights with Biomedical Gateway LLC, Conversion Energy Enterprises, ImArcSys, New Skin Therapies LLC; Served as Officer or Director for ASLMS, Council of the New York Chapter of the American College of Surgeons, House of Delegates of Medical Society of the State of New York, Monroe County Medical Society, North American Association for Laser Therapy, Society of Laparoendoscopic Surgeons; Consultant General and Plastic Surgery Devices Panel of the Medical Devices Advisory Committee of the FDA CDRH; Editorial Board and Consulting Editor of Lasers in Medical Science, Editor-in-Chief of Photomedicine and Laser Surgery
Larkinezhad, Parvin	See Supplement	No Disclosure
Laurino Neto, Rafael	77	No Disclosure
Leal Junior, Ernesto Cesar	75	Received financial grant, equipment and travel expenses paid by Multi Radiance Medical
Lee, Ho Bin	See Supplement	No Disclosure
Lee, Kachiu	87, 88	No Disclosure
Lee, Yongsoo	88	No Disclosure
Lerche, Catharina M.	49	No Disclosure
Levancini, Marco	80	No Disclosure
Levin, Yakir	84	No Disclosure

Name	Page #	Disclosure
Levine, Robert	44	No Disclosure
Lewis, William	91	No Disclosure
Li, Fang-hui	54, 77	No Disclosure
Li, Tao	77	No Disclosure
Lin, Yen-Pin	69	No Disclosure
Lindenmann, Joerg	81	No Disclosure
Lino-dos-Santos-Franco, Adriana	76	No Disclosure
Liu, Hui	81	No Disclosure
Liu, Timon Cheng-Yi	77, 90	No Disclosure
Lloyd, Amanda	88	No Disclosure
Lohscheller, Jörg	62	No Disclosure
Longo, Diego	54, 75	Travel expenses in the form of a travel grant paid by ASLMS
Longo, Leonardo	54, 75	Travel expenses paid by NESA (New European Surgery Academy), Poland Society of Aesthetic Medicine, Ukrainian Society of Aesthetic Medicine and Plastic Surgery
Lu, Yijijiao	90	No Disclosure
Lujan-Zilbermann, Jorge	88	No Disclosure
Lupo, Mary	34	No Disclosure
Luque, Daniel	80	No Disclosure
Lyons, Jeri-Anne	56, 76	No Disclosure
Mac, Jenny	49	No Disclosure
Macedo, Rodrigo	76	No Disclosure
MacGregor, Jennifer	27	Received consulting fees from Allergan, General Electric, L'Oréal USA, Merz
Madheswaran, Thiagarajan	70	No Disclosure
Madi, Otavio	77	No Disclosure
Madore, Wendy-Julie	61	No Disclosure
Maeda, Takuma	See Supplement	No Disclosure
Mahoney, Anne	71, 88	No Disclosure
Maire, Cyril	47	No Disclosure
Majaron, Boris	69	Received equipment from Fotona
Makdisi, Joy	85	No Disclosure
Makin, Inder Raj	44, 72	Received consulting fees from Merz
Mamalis, Andrew	49, 53	No Disclosure
Manchini, Martha	77, 90	No Disclosure
Mang, Thomas	16, 45, 46, 48, 54, 68, 69, 90	Received consulting fees from and travel expenses paid by Concordia Healthcare
Maniakas, Anastasios	61	No Disclosure
Marin, Ana	69	No Disclosure
Markey, Mia	69	No Disclosure
Marquardt, Yvonne	See Supplement	No Disclosure
Martin, Ron	74	No Disclosure
Martinez de Pinillos Bayona, Alejandra	91	No Disclosure
Martins, Orlando	44	No Disclosure
Marton, Sam	83	No Disclosure
Massa, Mary	72	No Disclosure

Name	Page #	Disclosure
Matin, Farnaz	See Supplement	No Disclosure
Maymone, Mayra	85	No Disclosure
McDaniel, David	7, 33, 59, 71	Received financial grant from BTL Aesthetics, Cynosure, Dermarche Labs, Fibrocell Science, Illumitex, Merz/CellFina; Received equipment from BTL Aesthetics, Cynosure, ThermiAesthetics, Zimmer; Received discount from BTL Aesthetics, Cynosure, ThermiAesthetics; Received consulting fees from BTL Aesthetics, Cynosure, Dermarche Labs, Illumitex, SkinMedica/Allergan/Kythera/Activis; Travel expenses paid by Kythera; Received honoraria from BTL Aesthetics, Cynosure Dermarche Labs, SkinMedica/Allergan/Kythera/Activis; Holds ownership interest with LifeSpan Extension, McDaniel Institute of Anti-Aging Research; Served on Advisory Board for Cynosure, Fibrocell Science, SkinMedica/Allergan/Kythera/Activis; Served on Promotional Speakers Bureau for Kythera; Served as Officer or Director McDaniel Institute of Anti-Aging Research, McDaniel Laser and Cosmetic Center; Coauthor on published study for Pfizer
McFarland, Kevin	See Supplement	No Disclosure
McLeod, Michael	85	No Disclosure
Meadows, Lionel	79	Received consulting fees and travel expenses paid by Sciton
Mesquita-Ferrari, Raquel	53, 77, 84	No Disclosure
Mignon, Charles	83, 84	Received grant funding from European Union Marie Curie Program; Received equipment, travel expenses paid by and received salary from Philips Research
Milanic, Matija	69	No Disclosure
Miletta, Nathaniel	84, 87	No Disclosure
Min, Seonguk	8, 86	Received grant funding from MOTIE (Ministry of Trade, Industry and Energy) of Republic of Korea
Minaev, Vladimir	90	Received salary from IRE-POLUS
Mirkov, Mirko	48	Received salary and holds ownership interest with Cynosure
Mishra, Vineet	17, 66, 83	Travel expenses paid by Ellipse; Received honoraria for educational services from Syneron-Candela
Miyashita, Hiroki	See Supplement	No Disclosure
Mlacker, Stephanie	See Supplement	No Disclosure
Mogensen, Mette	49, 70, 83	No Disclosure
Moldre, Lourdes	72	No Disclosure
Montemor, Jairo	77	No Disclosure
Mordon, Serge	17, 46, 47, 48, 68, 69, 79, 90, 91	Received salary From INSERM
Moreira, Wellington	See Supplement	No Disclosure
Moreno-Arrones, Oscar M.	See Supplement	No Disclosure
Morgan, Cherie	26	Travel expenses paid by, holds ownership interest with and served as Officer or Director for Integrated Laser Solutions
Mortier, Laurent	47, 79	Travel expenses paid by Galderma
Mota, Ana Carolina	84	No Disclosure
Moy, Wesley	49, 62, 91	No Disclosure
Mudd, Mary Beth	88	No Disclosure
Mueller, Nina Alexa	74	No Disclosure
Munavalli, Girish	17, 50, 59	No Disclosure
Muñoz, Johanna Cristina	51	No Disclosure
Murison, Max	85	No Disclosure
Murphy, Michael	48, 70	No Disclosure
Murray, John	88	No Disclosure
Na, Chan Ho	See Supplement	No Disclosure

Name	Page #	Disclosure
Naeser, Margaret	57	No Disclosure
Nakano, Shunji	91	No Disclosure
Nam, Seung Min	See Supplement	No Disclosure
Napatalung, Lynne	See Supplement	No Disclosure
Neckman, Julia	27, 50, 51, 72, 87, 89	No Disclosure
Negishi, Kei	51	Received grant funding from Cutera, Shiseido; Received equipment from Altek, Asclipion, Cutera, Cynosure, Sciton; Received consulting fees from Sciton; Received honoraria for educational services from Cutera, Cynosure, Sciton
Nelson, J. Stewart	22, 23, 65	Received grant funding from National Institutes of Health, Pfizer/Wyeth, Syneron-Candela; Received equipment from Cutera, Syneron-Candela; Travel expenses paid by, received honoraria for educational services from and holds intellectual property rights with Syneron-Candela; Received royalties from University of California
Nemergut, Michael	25	No Disclosure
Newman, James	See Supplement	No Disclosure
Nooreyzdan, Shahin	72	No Disclosure
Nouri, Keyvan	See Supplement	No Disclosure
Nwogu, Chukwumere	81	No Disclosure
Oakley, Emily	67, 81	No Disclosure
Ochoa, Shari	See Supplement	No Disclosure
O'Hagan, Marian	26, 27	Travel expenses paid by, received salary from and holds ownership interest in Cynosure
Oji, Tomito	See Supplement	No Disclosure
Oki, Yuka	91	No Disclosure
Olesen, Uffe Høgh	49, 70	No Disclosure
Olivan, Silvia	74	No Disclosure
Oliveira, Luis Vicente Franco	76	No Disclosure
Oliveira, Pedro	45	No Disclosure
Oliveira-Silva, Tamires	68	No Disclosure
Omland, Silje	67	No Disclosure
Onwudiwe, Oge	88	No Disclosure
Ortega-Martinez, Antonio	69, 70, 91	No Disclosure
Ortiz, Arisa	22, 23, 41, 56, 84	Received equipment from BTL, Cutera, Invasix, Merz, Sciton, Solta, Zeltiq; Received consulting fees from Alastin, Merz, Sciton; Travel expenses paid by and served on Promotional Speakers Bureau for Invasix, Kythera, Sciton; Received honoraria for educational services from Alastin, Invasix, Kythera, Sciton; Holds ownership interests with Allergan, Neothetics; Served on Advisory Board for Alastin, Invasix, Sciton
Owens, Patricia	22, 27, 39, 56	Received consulting fees from Rockwell Laser Industry; Received royalties from Cengage Malady; Received honoraria for educational services from Cosmetic Bootcamp LLC for meeting design, Dermatology Nurses Association
Ozog, David	84, 85	No Disclosure
Paasch, Uwe	48, 58	No Disclosure
Padilla, Juan Pablo	70, 74, 91	No Disclosure
Paithankar, Dilip	89	Received salary from, holds ownership interest with and served as Officer or Director for Sebacia
Pal, Rahul	69	No Disclosure
Palm, Melanie	34, 66	Received equipment from Lumenis; Received discount and served on Advisory Board for BTL, Lutronic; Received honoraria for educational services from BTL, Lumenis; Served on Speakers Bureau for Merz
Palma, Renata	76	No Disclosure

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Name	Page #	Disclosure
Palmer, John	45	No Disclosure
Paluchovska, Elwira	89	No Disclosure
Pandey, Rishikesh	49	No Disclosure
Parikh, Varisha	44	No Disclosure
Park, Eunsoo	See Supplement	No Disclosure
Park, So Eun	86	No Disclosure
Park, Song Youn	70	No Disclosure
Parsi, Kory	See Supplement	No Disclosure
Pedapati, Chandhana	44	No Disclosure
Penttinen, Jussi-Pekka	91	No Disclosure
Pereira Carlos, Fernando	77	No Disclosure
Pereira, Benedito	See Supplement	No Disclosure
Peres Leal, Mayara	76	No Disclosure
Pérez, Bibiana	See Supplement	No Disclosure
Peterson, Greg	See Supplement	No Disclosure
Petrell, Kathleen	26, 51	No Disclosure
Pfeffer, Christian	61	No Disclosure
Philipsen, Peter	81, 83	No Disclosure
Pinto, Nathali	77	No Disclosure
Porto, Dennis	84	Received equipment from First Derm; Travel expenses paid by Forefront Dermatology; Holds ownership interests from Cancer Genetics
Pozner, Jason	29, 55, 60	Received equipment from Alma, Apollo, Bella Contour, Canfield, Cutera, Cynosure, Deke, Exilis, Lutronic, Oculoplastic, Sciton, Serene, Syneron-Candela, Thermi, Zimmer; Received discount from Alma, Cynosure, Ellman, Invasix, Merz, RA Medical, Syneron-Candela, Zeltiq; Received honoraria for educational services from Cynosure, Sciton, Syneron-Candela, Thermi, Zeltiq; Holds ownership interest with Sciton, Thermi; Served on the Advisory Board for Syneron-Candela. Valeant, Zeltiq; Served on the Speakers Bureau for Cynosure, Merz, Sciton, Syneron-Candela
Prates, Renato	68, 84	No Disclosure
Prather, Heidi	51	No Disclosure
Proebstle, Thomas	50	Received grant funding, discount, honoraria for educational services, and served on the Speakers Bureau for Syneron-Candela
Purschke, Martin	See Supplement	No Disclosure
Qi, Qiaochu	92	No Disclosure
Raafs, Bianca	83	No Disclosure
Rajadhyaksha, Milind	92	Received grant funding and holds ownership interest with Caliber Imaging and Diagnostics
Ramos, João	44	No Disclosure
Rantamäki, Antti	91	No Disclosure
Rapaka, Shilpa	See Supplement	Travel expenses paid by and received salary from Pacific Bioscience Laboratories
Ratto Tempestini Horliana, Anna Carolina	84	No Disclosure
Reichenberg, Jason	69	No Disclosure
Revathi, Dineshkumar	See Supplement	No Disclosure
Rho, Nark-Kyoung	See Supplement	No Disclosure
Ribeiro, Beatriz	77	No Disclosure
Richters, Renée	See Supplement	No Disclosure

Name	Page #	Disclosure
Rivlin, Daniel	See Supplement	No Disclosure
Riyaz, Farhaad	85	No Disclosure
Rizk, Alain	88	No Disclosure
Rizvi, Imran	8, 68, 81	No Disclosure
Robinson, Deanne M.	66, 72	Received grant funding and equipment from Cynosure, ThermiAesthetics; Received consulting fees from Merz, Paradigm Medical; Travel expenses paid by and served on Promotional Speakers Bureau for Paradigm Medical; Served on Advisory Board for ThermiAesthetics
Rodrigues, Raïssa	76	No Disclosure
Rogers, Stephen	68	No Disclosure
Roggy, David	See Supplement	No Disclosure
Ross, E. Victor	24, 26, 29, 55, 65, 88, 89	Received grant funding from Alma, Cutera, Cynosure, Lumenis, Lutronic, Syneron-Candela; Received equipment from Cynosure; Received discount from Alma; Received consulting fees from Cynosure, Inmode, Lumenis, Miramar Labs, Sebacia, Syneron-Candela; Travel expenses paid by Alma, Cynosure, Cutera, Lumenis
Ross, Gerry	44	Received honoraria for educational services from Zolar
Rossi, Anthony	17, 83, 92	Received consulting fees from Dynamed, Esteya, Novartis; Received honoraria for educational services from Allergan; Served on the Advisory Board for AAD
Rubin, Iris	25	No Disclosure
Rudd, Grant	81	No Disclosure
Sadick, Neil	70, 89	Received financial grant from Chromogenex, Suneeva; Received equipment from Chromogenex, Endymed; Received discount and honoraria for educational services from Chromogenex; Received consulting fees from Suneeva
Saedi, Nazanin	17, 50, 55, 71, 85, 87	Received grant funding and equipment from Cynosure
Sakamoto, Fernanda	31	Received consulting fees from Olivo, Inc., Living Proof LLC; Holds ownership interests with Seven Oaks
Salgueiro, Monica	See Supplement	No Disclosure
Saluja, Sandeep	85	No Disclosure
Salvador, Jocelynda	49	No Disclosure
Samarkandy, Sahal	See Supplement	No Disclosure
Sanford, Craig	40, 44	No Disclosure
Santos Silva Jr, Zenildo	See Supplement	No Disclosure
Santos, Camila	See Supplement	No Disclosure
Santos, Larissa	See Supplement	No Disclosure
Sanyaolu, Leigh	85	No Disclosure
Saylor, Drew	84	No Disclosure
Scafuri, Louis	85	Travel expenses paid by, received salary from and served as Officer or Director ZALEA
Schalch, Tatiana	53	No Disclosure
Schallen, Konika	80	No Disclosure
Schuster, Maria	61, 62	No Disclosure
Seaward, James	73	No Disclosure
Semchin, Munkhbayar	67	No Disclosure
Sencar, Sabina	79	No Disclosure
Sensing, Whitney	See Supplement	No Disclosure
Sercarz, Joel	82	No Disclosure
Serra, Andrey	77, 90	No Disclosure

FACULTY & SPEAKER DISCLOSURES

Name	Page #	Disclosure
Shafirstein, Gal	67, 81	Received financial grant from NIH/NCI, Pinnacle Biologics; Received equipment from Biolitec; Received consulting fees from Kyowa Hakko Kirin Co.; Holds ownership interest with GNess LLC; Have intellectual property rights with Co-inventor on two patent applications - Roswell Park Cancer Institute; Served as Officer or Director IT'IS USA
Shah, Vidhi	See Supplement	No Disclosure
Shaojuan, Hu	See Supplement	No Disclosure
Shek, Samantha Y.N.	50, 51, 72, 92	No Disclosure
Shelton, Ron	72	Holds ownership interest in ThermiAesthetics
Shin , Hyoseung	67	No Disclosure
Shin, Bong Seok	See Supplement	No Disclosure
Shlossman, Marc	44	No Disclosure
Shofner, Joshua	87	No Disclosure
Shumaker, Peter	24, 84	No Disclosure
Sierra, Heidi	92	No Disclosure
Silva, Cristiane Miranda	See Supplement	No Disclosure
Silva, Daniela	67, 79	No Disclosure
Silva, Jose	77, 90	No Disclosure
Singh, Selina	85	No Disclosure
Siwy, Katherine	87	No Disclosure
Skazik-Voogt, Claudia	See Supplement	No Disclosure
Slayton, Michael	91	Received salary from, holds ownership interest, has intellectual property rights with, and served as an Officer or Director for GTS
Sleiman, Rima	87	No Disclosure
Sliney, David	6, 69, 70	Received consulting fees from Avedro, Carl Zeiss Meditec, Excel-lens, Gecko Biomedical, Tearfilm, Welch-Allyn; Travel expenses paid by Avedro, Excel-lens, Tear-film
Smolic, Milena	81	No Disclosure
Smucler, Roman	45, 87	No Disclosure
Soemantri, Silas Paras	See Supplement	No Disclosure
Sood, Rajiv	See Supplement	No Disclosure
Sørensen, Søren Schwartz	67	No Disclosure
Sorokin, Nikolay	See Supplement	No Disclosure
Soukos, Nikolaos	40	Received consulting fees from, holds ownership interest with, has intellectual property rights with, and serves as Officer or Director for PhotOral; Received honoraria for educational services for Boston University
Sousa, Aline	See Supplement	No Disclosure
Sousa, Kaline	53	No Disclosure
Souza, Ana	See Supplement	No Disclosure
Souza, Nadhia	77	No Disclosure
Sprague, Rebecca	27, 39	Served on Advisory Board for DUSA, Galderma
Spring, Bryan	68	No Disclosure
St. John, Maie	83	No Disclosure
Stankiewicz, Kelly	32, 66	Received discount from, travel expenses paid by and served on Promotional Speakers Bureau for Cutera; Served on Advisory Board for Galderma
Steiner, Timm	See Supplement	No Disclosure
Stepp, Herbert	61	No Disclosure
Stoddard, Marie	See Supplement	No Disclosure

Name	Page #	Disclosure
Stoll, Mary	6, 26, 27, 56	Travel expenses paid by, received salary from, and holds ownership interest with Cynosure
Stücker, Markus	See Supplement	No Disclosure
Summers, Erika	85	No Disclosure
Sweeney, Sarah	See Supplement	No Disclosure
Tadlock, Lauri	See Supplement	Received salary from and served on Promotional Speakers Bureau for Pacific Bioscience Laboratory
Tan, Ing	81	No Disclosure
Tanaka, Shiho	51	No Disclosure
Tandon, Shruti	45	No Disclosure
Tanghetti, Emil	17, 24, 48, 50, 51, 71, 87	Received financial grant from DUSA; Received discount from Cynosure; Received consulting fees from Allergan, DUSA, Galderma, Obagi; Served on Advisory Board for Cynosure, DUSA, Galderma
Tank, Amy	88	No Disclosure
Tannous, Zeina	88	No Disclosure
Tanzi, Elizabeth	24, 35, 39, 42	Received equipment from Sciton, Syneron-Candela; Received a discount from Merz, Solta-Valeant, Syneron-Candela, Zeltiq; Received consulting fees from Beiersdorf; Received honoraria or gifts for educational services from Syneron-Candela, Zeltiq; Served on Advisory Board for Aclaris, Miramar, Zeltiq
Taylor, Zachary	83	No Disclosure
Tearney, Guillermo	92	Received grant funding from Ardea Biosciences, Canon, iLumen; Travel expenses paid by Canon, Sinolink; Received royalties from MIT, NinePoint Medical, Terumo; Holds intellectual property rights with Massachusetts General Hospital, MIT; Served on Advisory Board for Canon, NinePoint Medical
Thaysen-Petersen, Daniel	49, 70, 81, 83	No Disclosure
Thies, Boris	74	No Disclosure
Thornton, Julie	84	No Disclosure
Tillman, Karl	89	No Disclosure
Tobin, Desmond J.	83, 84	No Disclosure
Tobita, Saori	See Supplement	No Disclosure
Togsverd-Bo, Katrine	49, 67	No Disclosure
Torstensson, Per-Arne	48, 70	No Disclosure
Touchette, Genna	69	No Disclosure
Town, Godfrey	See Supplement	Received consulting fees from Philips; Holds ownership interest with Calon Tech, CyDen, Reading Clinical Research; Served as Officer or Director for Reading Clinical Research
Tremaine, Anne Marie	41	No Disclosure
Tretti Clementoni, Matteo	35	Received grant funding and salary from Lumenis; Received Equipment from Lutronic; Received discounts from Galderma, Lumenis, Lutronic; Received consulting fees from Quanta System; Travel expenses paid by Galderma, Lumenis; Holds ownership interest with and served on Advisory Board for Lumenis, Lutronic
Tucci, Paulo	77, 90	No Disclosure
Tunnell, James	69	No Disclosure
Tylcz, Jean-Baptiste	47, 68, 79	No Disclosure
Uebelhoer, Nathan	38, 65	Travel expenses paid by and Received honoraria from Lumenis
Uzunbajakava, Natallia Eduarda	83, 84	Received financial grant from EU commission funded Marie Curie Actions Grant; Received salary from and have intellectual property rights with PHILIPS Electronics Nederland B.V.
Van Beek, Marta	See Supplement	No Disclosure
van den Boom, Ferrie	See Supplement	No Disclosure

FACULTY & SPEAKER DISCLOSURES

Name	Page #	Disclosure
van Doeveren, Tessa	81	No Disclosure
van Erp, Piet	See Supplement	No Disclosure
van Mourik, Anke	81	No Disclosure
van Veen, Robert	81	No Disclosure
van Vlimmeren, Marijke	83	Received salary from and have intellectual property rights with Philips
Varughese, Neal	88	No Disclosure
Vashi, Neelam	85	No Disclosure
Vasily, David	93	Received grant funding from Lutronic; Received equipment from Alma, Lutronic, Viora
Vazamim Cumpri, Brenda	90	No Disclosure
Verma, Mahesh	45	No Disclosure
Vermandel, Maximilien	68	No Disclosure
Vicentini, Claire	47, 79	Travel expenses paid by Galderma
Vidovic, Luka	69	No Disclosure
Vignion, Anne-Sophie	See Supplement	No Disclosure
Villanueva, Michelle	51, 88	No Disclosure
Vinarov, Andrey	90	No Disclosure
Vitruk, Peter	See Supplement	No Disclosure
Vizintin, Zdenko	79, 80	Received salary from, have intellectual property rights with and served as Officer or Director for Fotona
Volgger, Veronika	61, 62	No Disclosure
Waibel, Jill	24, 26, 27, 58, 73, 87, 88	Received equipment from Alma, Lutronic, Michelson Diagnostics; Received consulting fees from Valeant; Received honoraria for educational services from Sciton; Holds intellectual property rights with University of Miami as Co-inventor; Served on Advisory Board for Sciton, Sebacia; Served on Promotional Speakers Bureau for L'Oréal, Sciton/Harvest, Syneron-Candela; Alma, L'Oréal, Lumenis, Lutronic, Sciton/Harvest, Sebacia
Walinski, Christopher	40	No Disclosure
Wall Jr., Simeon	72	Received equipment, consulting fees and travel expenses paid by Merz
Wang, Jian	91	No Disclosure
Wang, Ruimin	90	No Disclosure
Wang, Ying	70, 73, 74	No Disclosure
Wang, Yucheng	68	No Disclosure
Ward, Chantal	26	No Disclosure
Weiss, Elliot	50, 87	No Disclosure
Weiss, Margaret	56, 71	Received grant funding from Allergan, Cynosure, Evolus, Fibrocell, Galderma, Medtronic, Merz, Revance, Sebacia, Valeant; Received equipment from BTL Industries, Cynosure, Syneron-Candela; Received honoraria for educational services from Allergan, BTL Industries, Cutera, Cynosure, Fibrocell, Galderma, Merz, SkinCeuticals, Syneron-Candela, ThermiAesthetics; Served on Advisory Board for Allergan, Cynosure, Merz, Syneron-Candela
Weiss, Robert	3, 4, 16, 22, 23, 42, 43, 55, 59, 65, 71, 72, 78, 88, 93	Received financial grant from Allergan, Evolus, Fibrocell, Galderma, Medtronic, Merz, Revance, Sebacia, Valeant; Received equipment from BTL Industries, Cynosure, Syneron-Candela; Received discount from Allergan, BTL Industries, Cutera, Cynosure, Fibrocell, Galderma, Merz, SkinCeuticals; Received consulting fees from Galderma, Medicis, Syneron-Candela; Travel expenses paid by Allergan, BTL Industries, Cutera, Cynosure, Fibrocell, Galderma, Merz, SkinCeuticals; Received salary from Cynosure; Served on Advisory Board for Allergan, Merz, Cynosure, SkinCeuticals, Syneron-Candela; Served on Promotional Speakers Bureau for Cynosure
Wenande, Emily	9, 89	No Disclosure
Werschler, William	72	No Disclosure

Name	Page #	Disclosure
Williams, Maura	91	No Disclosure
Winkler, Christopher	64	No Disclosure
Witjes, Max	74	No Disclosure
Wolfsen, Herbert	46	No Disclosure
Wrazen, Brian	67, 81	No Disclosure
Wu, Chong-Yun	See Supplement	No Disclosure
Wu, Xingjia	54, 68	Received salary from LiteCure
Wulf, Hans Chr.	67	Received financial grant from Leo Pharma; Received equipment and consulting fees from Galderma
Xie, Chunhui	See Supplement	No Disclosure
Xu, Shuai "Steve"	37, 86	No Disclosure
Xu, Zundi	87	No Disclosure
Yadav, Neha	45	No Disclosure
Yang, Jinping	69	No Disclosure
Yang, Luo-Dan	See Supplement	No Disclosure
Yao, William	8, 83	No Disclosure
Yaroslavsky, Anna	92	No Disclosure
Yaroslavsky, Ilya	90	Travel expenses paid by, received salary from and holds ownership interest in IPG Medical
Yeung, Chi Keung	51, 72, 92	No Disclosure
Yoo, Kwang Ho	See Supplement	No Disclosure
Yoon, Ji-Seon	67	No Disclosure
Youssef, Nour	88	No Disclosure
Zamuner, Stella	9, 54, 77	No Disclosure
Zamyatina, Viktoria	90	Travel expenses paid by and received salary from NTO IRE-Polus
Zeitouny, Mounir	83	Received financial grant from Marie Curie Grant; Received salary from and have intellectual property rights with Philips Electronics
Zelickson, Brian	71	Received grant funding from Miramar, Newton Medical, Siena Lab, Zeltiq; Received royalties from Alma, Syneron-Candela; Holds ownership interest with Newton Medical, Sienna Lab; Holds intellectual property rights with Newton Medical; Served on Advisory Board for Lumenis, Merz, Syneron-Candela, Zeltiq
Zhang, Quanguang	77, 90	No Disclosure
Zhu, Hong	69	No Disclosure
Zhuang, Anne	51	No Disclosure

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Suite 240
Wausau, WI 54401
phone: 715-845-9283
fax: 715-848-2493
email: information@aslms.org



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