



# Laser Safety Officer - LSO

Laser Safety Officers, Nurses, Physicians, Laser Operators,  
Cosmetic Laser Operators, Industry Representatives

**2 DAY Laser Certification Program**

**The Laser Training Institute™**

a training division of

**Professional Medical Education Association, Inc.**

*not-for-profit education, est. 1980*

**800-435-3131**

**- FOR MEDICAL & AESTHETIC PROFESSIONALS -**

*Sharing the Light*

## **COURSE DESCRIPTION:**

This program is utilized by Nurses, Physicians, Biomedical Engineers and Medical Spa technicians to meet the educational requirements for Laser Safety Training. Additionally the course trains Medical Laser Safety Officers (MLSO's) who have been given the responsibility of establishing the institutions Laser Safety Program. As part of this course, a basic Laser Powerpoint presentation is provided that can be used for teaching purposes for your own staff. Each participant receives an electronic copy of the "Lasers in Medicine" book which includes color photos and illustrations, and an electronic copy of the powerpoint presentations with 3 slides per page. The two day program provides a thorough understanding of all procedures required to ensure compliance of your laser safety program with ANSI, OSHA and Joint Commission. LASER CERTIFICATION PROGRAMS for LSO's will be discussed at this program and attendees may sit for the NCLE/BLS Laser Certification Examination the second afternoon of the course.

**REGISTRATION: PreRegistration is Required.**

(make additional copies for more registrations)

**FAX back to 305-946-0232, or mail to:**

**Professional Medical Education Assn.**

**PO Box 997**

**Grove City, OH 43123**

**NAME:** \_\_\_\_\_

**FACILITY:** \_\_\_\_\_

**ADDRESS:** \_\_\_\_\_

**CITY:** \_\_\_\_\_ **ST** \_\_\_\_\_ **ZIP** \_\_\_\_\_

**Tel#** \_\_\_\_\_ **Fax#** \_\_\_\_\_

**Email (confirmation)** \_\_\_\_\_

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**COURSE FEE: \$895 includes course, morning coffee breaks, electronic copies of the Power-Point presentations and Lasers in Medicine Manual, the staff Laser Safety Inservice presentation and optionally the NCLE/BLS Medical Laser Safety Officer Certification. \$100 discount for 30 day prepayment.**

## THE LASER COURSE Medical Laser Safety Officer

**LSO'S are provided with teaching materials they need to go back and implement a laser safety program. These include 2 Powerpoint presentations on Laser Safety for Staff. The Course Manual also includes a full set of Laser Safety Policies and Procedures.**

**If you're a Medical or Aesthetic Professional (not industrial), then this program is for you. This is NOT an industrial hygiene laser safety program or industrial laser laser offshoot course that is occasionally promoted to hospitals by those groups.**

*Laser Training FOR Medical /Aesthetic Professionals*

### DISCOUNTS:

Prepay the registration fee and save \$100 !  
(more than 30 days in advance of the course)

ANSI 136.3 Standards: Available for the discounted price of \$75 (regularly \$155+)

MLSO Certification included for free.

800-435-3131

## AESTHETIC and MEDICAL/SURGICAL LSO's:

All hospitals, outpatient surgeries, clinics, medical offices, Medi-Spas, Aesthetic Practices and essentially ANYONE who uses lasers for therapy or treatment on people are required to appoint a Laser Safety Officer. This course will prepare you for those administrative responsibilities. For those in Aesthetics that want training in "How To" perform specific procedures—this course DOES NOT do this. It is intended to meet your requirements for Safety Officer. The clinical training for aesthetic procedures is a separate issue and covered in our Aesthetic Laser Procedures Courses.

### STATE REQUIREMENTS FOR LSO's:

It's up to you to determine whether your State has requirements for registration and formal training of Laser Safety Officers. Most do not but a few do—most notably **Texas and Arizona** (Aug 2011). Each facility or office using lasers MUST appoint an LSO. You are required to show proof of formal Laser Safety Officer training and this course meets that requirement. For Az you must attend an actual seminar of 2 days or more to meet this requirement. In Tx you can attend a seminar *OR* complete one of our online LSO courses to meet this requirement. No State (as of Aug 2011) requires an actual **CERTIFICATION** for their Laser Safety Officer—only evidence of formal training.

## COURSE OUTLINE:

### Day 1

#### LASER & ENERGY CONCEPTS

**8:00am - 8:30am - Registration & Coffee**

**8:30am - Introduction & Start to Course**

Basic Laser, Energy & Tissue effect Concepts .Electromagnetic Spectrum, Laser Wavelengths, How Lasers Work, Laser Characteristics, Power Density, Spot size, Energy Density, Watts, Joules, Fluence, PhotoThermal/Acoustic/Disassociation/Chemical tissue effects, Reflection, Absorption, Scattering, Transmission, Heat Confinement. Aesthetic Laser use brief overview.

**12:00 - LUNCH - on your own**

#### PERIOPERATIVE SAFETY & ADMINISTRATION

**1:30pm - LASER HAZARDS & SAFETY -**

Policies & Procedures, LSO duties, Laser Safety Program, Laser Hazards including Eye & Skin Burns, Laser Plume, Nonbeam hazards, Nominal Hazard Zones, Laser Treatment Controlled areas, MPE's, Eyewear requirements, Window coverings, Controlled room access.. Includes Case Histories of Laser Complications and Accidents.

**4:30pm Questions & Answers**

**5:00pm - Adjourn for Day**

### Day 2

**8:00am**

#### LASER HAZARDS & SAFETY—CONTINUED

#### ANSI 136.3 LASER SAFETY STANDARDS:

**Safe Use of Lasers in Health Care Facilities**

#### LASER CERTIFICATION REVIEW

For Medical Laser Safety Officers,

**12-1:30 pm - LUNCH - on your own**

(Note—at the option of students, we can skip lunch and you can start the exams right away.)

#### MLSO LASER CERTIFICATION EXAMINATIONS

**(Taking the NCLE/BLS Official Exam is optional. Those opting out of the official exam will be given a substitute practice exam which is self graded)**

Please review the Certification Candidate Handbook from the National Council on Laser Excellence at [www.LaserCertification.org](http://www.LaserCertification.org).

**5:00pm—Adjourn—or whenever your finished with exams.**

**Provider Approved by the California Board of Registered Nursing  
Provider # CEP 12386 for 16.1 Contact Hours**

**Note: Most State Boards of Nursing have reciprocity for accepting credits for continuing education. Check with your own State Board of Nursing.  
Certificates of Attendance will be provided.**



# FACULTY -

**Gregory T. Absten, B.Sc., CLRT, MBA.**  
**Executive Director Professional Medical Education**

A 30+ year veteran in the Medical Laser Field, Mr. Absten is an internationally recognized lecturer and author on the subject of medical laser applications and safety. He is the Executive Director of Professional Medical Education Assn., Inc. -- the non-profit group sponsoring this course through the Laser Training Institute division. A Scientific Fellow with the American Society for Laser Medicine (ASLMS) and Surgery, he has served as the Course Director for the "Laser Biophysics and Safety Courses" for a number of years at their annual scientific meetings, has sat on the Board of Directors for the ASLMS in the Laser Safety seat., and continues activity on several committees and Chairs the Annual Scientific Exhibits. He is a member of the ANSI 136.3 Committee on the Safe Use of Lasers in Health Care Facilities, and a Board Member of the International Aesthetic and Laser Association

He previously served as Clinical Instructor with The Ohio State University College of Medicine, and University of Cincinnati, and has served as a Director or Advisor to many medical laser organizations., including initial development of the medical laser safety programs of the Laser Institute of America (LIA). He has taught hundreds of physician and nursing laser courses and has been actively involved with hands-on physician training in both surgical lasers and endoscopic procedures in most specialties. His initial clinical background in the 70's involved Critical Care patient management as a Registered Respiratory Therapist, before he started building lasers at home in his garage.

**Alternate qualified faculty substituted on some courses.**



**For More Information & Links**  
**Visit our Website at**

**[www.LaserTraining.org](http://www.LaserTraining.org)**

**You can even download a FREE copy of the manual we'll use for this course !**

## **COURSE OBJECTIVES:**

- Describe the basic biophysics of laser and light
- Name three primary types of surgical lasers and list their wavelengths
- Explain conceptually how lasers work, and explain the differentiating characteristics of laser
- Discuss the pertinent energy, optical and fiber concepts that are applicable to medical laser use
- Demonstrate an understanding of Laser and Energy concepts
- Describe the four different types of laser/tissue interactions and explain the importance of thermal confinement to surgical outcome.
- Demonstrate an understanding of the Biological effects of laser on tissue
- Demonstrate an understanding of the pertinent energy, optical and fiber concepts that are applicable to medical laser use, and describe appropriate safety precautions for demonstration type use.
- Describe the types of hazards which laser presents to personnel and patients, along with some of the related hazards associated with laser surgery.
- Explain the safety precautions and procedures recommended by ANSI during laser surgical procedures.
- Demonstrate an understanding of Laser Hazards, Safety, Precautions and Regulations as recommended by ANSI.
- Explain the types of procedures by specialty in which laser energy may be useful and describe in general terms the instrumentation requirements of these various procedures
- Demonstrate an understanding of Clinical laser applications and instrumentation
- List 3 application areas of laser development and identify the types of lasers involved.

## WHY ATTEND?

- Familiarize yourself with ANSI 136.3 Standards, or review them for clarification
- Great for Staff turnover and staying current
- This is the MAINSTAY LASER TRAINING PROGRAM in the United States
- Courses consistently rated excellent by past attendees
- 16.1 Nursing Credits, qualifies for Category II CME credits, & qualifies for AAMI Biomed Credits
- Ensure your compliance with OSHA and Joint Commission - You MUST have a Laser Safety Officer
- Learn about the Laser Certification for Medical Laser Safety Officers
- Obtain all the teaching materials we provide at the course so you can go home and train YOUR staff.



As a recent attendee stated: “This is a very practical course .... Though I was initially intimidated by all the material I was expected to learn about lasers, I was pleased to see that it was all presented in a clear and easy-to-understand manner for a staff nurse such as myself to comprehend and use. I’d recommend this program”.

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## NATIONAL COUNCIL ON LASER EXCELLENCE (NCLE) - LASER CERTIFICATION NCLE Laser Certified™

The National Council on Laser Excellence is a Credentialing Board of our nonprofit Professional Medical Education Association. Candidates applying for Laser Certification should download the Candidate Handbook on the NCLE website at [www.LaserCertification.org](http://www.LaserCertification.org). NCLE application and testing fees are waived for attendees of this Certification Program. Applicants wishing to sit for the Certification Exam but not enroll in the course may do so by submitting an application in advance, with appropriate fees, to the NCLE as directed on the website. Attendees at this training program do not need to fill out applications in advance and all paperwork may be completed during the course. Taking an examination is optional. The classes of Laser Certification are explained on the website but include:

- Certified Laser Repair Technician (CLRT)
- Certified Medical Laser Safety Officer (CMLSO) - offered in conjunction with the Board of Laser Safety (BLS)
- Certified Laser Operator / Aesthetic (CLO/A)
- Certified Laser Hair Removal Provider (CLHRP)

**CALL 1-800-435-3131 AND REGISTER WITH A CREDIT CARD**