

COURSE
DESCRIPTION: *The “Surgical Booties Camp” of Laser Training*

The Laser Course

Medical Laser Safety Officers &
Surgical Operators / Assistants



This program is utilized by Nurses, Physicians, Technicians, Aestheticians and Biomedical Engineers to meet the educational requirements for Laser Biophysics, Tissue Interaction and Laser Safety Training required by A.N.S.I.. Additionally the course trains Laser Safety Officers (LSO'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. It also includes a full PowerPoint presentation with embedded videos on Airway Laser Safety for Hospital LSO's. The full two day program provides a thorough understanding of all procedures required to ensure compliance of your laser safety program with ANSI, OSHA and JCAHO, and meet various State requirements, for both Hospitals or private practices.

OPTIONAL 3rd Day for FREE! – Hands-on operation of various medical lasers. See outline

The Safety presentations we use in this program is the same Safety material we have developed and presented on behalf of the American Society for Laser Medicine & Surgery (ASLMS) for use in training at their annual Scientific meeting, and regional courses. We present the Laser Safety portions of that training for the ASLMS.



BECOME A CERTIFIED MEDICAL LASER SAFETY OFFICER!

The NCLC LASER CERTIFICATION PROGRAM for LSO's will be discussed at this program, and Certification Exams and Intensive Review taken at the option of the participant the last afternoon. The ANSI Standards now RECOMMEND the Certification.

This is the "Boot Camp" Laser course to gain a solid foundation in Medical/Surgical Laser Safety, earn a certificate of Laser Training, and optionally sit for the Medical Laser Safety Officer Certification Exam.

**Medical Laser Safety Officer &
Surgical Operator / Assistant**
A Laser Certification Preparation Program
2 Day Course Outline – Optional 3rd Day
(Columbus OH classes only 3rd day)

Day 1— 8:00am-5:00pm (times may vary slightly from course to course)

SESSION I:

7:30 am **Registration & Coffee**

7:55 am **Course Introduction**

8:00 am **Fundamentals of Laser & Light Use (Laser Biophysics), & Tissue Effects**

Practical laser biophysics - Types of Lasers & Light Sources - Pulse lengths - Wavelengths
- Energy Concepts – Dosimetry – Delivery Systems - Thermal Relaxation Times - IPL vs Laser
Light/Tissue Interaction - Photodynamic Therapy—Pulsing & CW beam delivery— Delivery devices

9:30 am **BREAK**

9:45 am **Continue with Fundamentals of Laser & Light Use**

12:00 **LUNCH** - Provided

1:15 pm **Laser Safety - Risk Assessment, Administrative & Procedural Controls**
Compliance with ANSI standards

2:15 pm **BREAK**

2:30 pm **Laser Safety Continued—Laser Safe Practices**

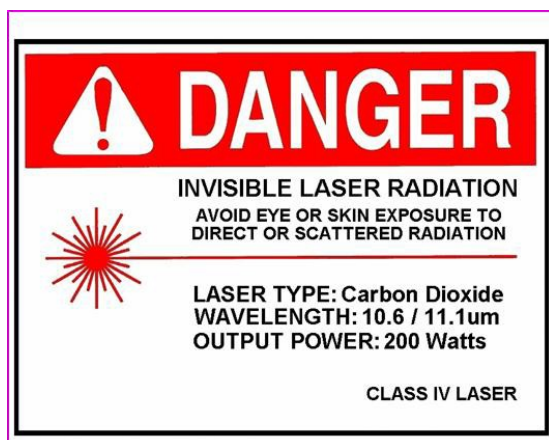
3:30 pm **BREAK**

3:40 pm **Laser Safety Including Considerations for Surgical & Aesthetic Environments**

4:40 pm **Discussion**

5:00 pm **Adjourn**

(420 actual minutes)



ONLINE LSO COURSE - This program is also available as a computer based Online Training program. It's available on an individual basis, or in blocks of 2-7 individuals at discounted fees. The Laser Certification Exams may only be administered at in-person seminars, but the online course will meet the requirements for eligibility to take the exam, and you may apply for and take the exam separately from the online course.

Information is available at www.LaserTraining.org under the "Computer Based Learning" page.

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Day 2— 8:00am-4:30pm (times may vary slightly from course to course)

SESSION I:

7:30 am **Coffee & Sign-in**

8:00 am - 11:00 am

Review of ANSI 136.3 Standards—Safe Use of Lasers in Health Care Facilities
(American National Standards Institute)

10:00—10:15 am BREAK

11:00 am **CERTIFICATION REVIEW**—Detailed “Jam Session” Review for
NCLC Medical Laser Safety Officer Certification
(Now recommended by ANSI Standards)

12:15 LUNCH - Provided

(at option of each attendee, you may skip lunch and start the exam right away to get out early)

1:30 pm **NCLC LASER CERTIFICATION EXAM—PROCTORED TESTING**

This is at the option of the attendee, but included in this program

3 hours is allotted for the testing. Many finish within 2 hours.

Participants will be able to review their score before leaving.

There is no “down-side” if you do not pass the exam the first time. You still receive your Certificate of Laser Training.

4:30 pm **Adjourn—Awarding of Certificates of Laser Training**

(You can leave whenever you are finished with the examination)

(405 actual minutes)



Candidates should review in advance all Certification Requirements contained in the Certification Handbook.

NCLC Certified Medical Laser Safety Officer (CLSO/M)

www.LaserCertification.org

Offered since 2000, the Medical Laser Safety Officer certification is administered through the National Council on Laser Certification. We will administer this examination the last afternoon of the course. You may complete the required paperwork at the time of the course and do not need to make advance application.

The Laser Safety Officer Certification is a Professional Credential that reflects your knowledge in this field. This Certification is NOT a requirement of any State, but is recommended by ANSI standards. It DOES reflect your professionalism in this field. **You will be setup 10 days prior to the course for an online “Practice Exam”** that self-grades online. You can take this as many times as you like prior to the actual exam.

Day 3— OPTIONAL - 8:00am-12:30pm (times may vary slightly from course to course)
HANDS-ON PRACTICAL EXPERIENCE (Recommended by ANSI for LSO's)
These Hands-on sessions are available only in our Columbus Ohio office (no additional charge)

SESSION I:

7:30 am **Coffee & Sign-in**

8:00 am – 12:30 pm. **Break at 10am for 20 minutes.**

HANDS-ON LASER TRAINING. Breakout sessions separated into two groups for hands-on laboratory exercises with various lasers. These are the same types of hands-on exercises that we conduct for surgical residents for their credentialing. Rotations may vary, but are primarily with these lasers and exercises. You'll operate the laser AND perform inanimate lab exercises.

CO2 Laser. Hand-piece and micromanipulator use. Pulsed and CW modes. Vaporization and incisions in inanimate models such as apples and chicken. Selection of proper spot size vs power for vaporization. Practice test shots for alignment.

CW Nd:Yag Laser: Transmitting and contact fiber use for photocoagulation and incisions in liver and chicken. Demonstration of dark selectivity of beam absorption.

Q-Switched Nd:Yag Laser Ophthalmic – Photoacoustic use of the laser for membrane disruption. Here we'll be taking the ink off of dollar bills in the President's eye, and you can take that home as a souvenir.

Q-Switched Tattoo removal lasers – You too can take pigmented tattoos off of eggshells. Use of Nd:Yag, Alexandrite and KTP wavelengths for tattoo removal.

Pulsed Dye Yellow Light Laser – Used for primarily red vascular lesions. Practice on colored magazine pages to remove pigment, and practice on Zap-It paper for coordination.

Ho:Yag Laser. Use of the Ho:Yag laser fibers to demonstrate the high degree of safety at a short distance from the tip. Break apart eggshells without disrupting the membrane of the egg beneath, and break apart small hard candy pieces under water like kidney stones.

Hair Removal Lasers – Use of either the Alexandrite or Nd:Yag laser for laser hair removal. Practice coordination on Zap-It paper, or shoot yourself if you want.

12:30 pm **Adjourn—Awarding of Certificates of Laser Training**

(655 actual minutes)

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 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 several types of procedures by specialty in which laser energy may be useful and describe in general terms the instrumentation requirements of these various procedures.



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**Provider Approved by the California Board of Registered Nursing
Provider # CEP 12386.**

**Medical Laser Safety Officer Full program with review and examination: 16.1 contact hours
20+ contact hours if attending the optional 3rd day of hands-on training.**

**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.**

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COURSE FEE: includes all materials - \$895

DISCOUNTS!

2 Registrants! - Two people register together and 2nd person is 15% discounted!

..... also - prepayment of 30 days or more in advance saves \$100!

PLUS! - If you buy our Medical Laser Safety Officer Online course through our website in advance, we'll apply 100% of that fee (for one person) toward this 2 day courses if you register within 6 months of buying the online course.

FACULTY - Rotating Faculty between:

Gregory T. Absten, B.Sc., MBA, CLSO/M
Executive Director
Professional Medical Education Assn.



A 41 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 and Surgery, he has served as the Course Director for the ASLMS "Laser Biophysics and Safety Courses" for a number of years at their annual scientific meetings, and has taught for the Nursing Course and "Fundamentals of Laser" Course of this meeting many times. He served as the Exhibits Chairman for the annual Scientific Meeting for more than 14 years, was a member of the Laser Safety committee, and past member of the Board of Directors. He is a member of the ANSI 136.3 Committee on the Safe Use of Lasers in Health Care Facilities, and is on the Board of Directors for the International Aesthetic & Laser Association (IALA). He is a Clinical Instructor with The Ohio State University College of Medicine, and has served as a Director or Advisor to many medical laser organizations. He chairs the National Council on Laser Certification. 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, while he built lasers at home.

Professional Medical Education Association provides the nursing accreditation for the annual American Society of Lasers in Medicine & Surgery scientific meeting.

Curriculae Vitae available at <http://www.lasertraining.org/Administrative/Library/AbstenCV.htm>
(You can copy and paste this into your browser)

Dan Little, CBET, CLRT, CLSO/M
Technical Director
The Laser Training Institute™ of Professional Medical Education Association



President of Worldlink Biomedical, an independent service group offering Medical Laser Service and Repair. Dan previously served as the Director of Biomedical and Scientific Engineering, and Medical Laser Safety Officer for Roswell Park Cancer Institute in Buffalo NY.

Currently he is the Technical Director for the Laser Training Institute™ of Professional Medical Education Association. He has served as an independent consultant on many different biomedical technology applications, and has held technical positions with various groups since 1972. He teaches in-house aesthetic laser procedures to various manufacturers, clinics and med-spas throughout the U.S., as well as in-house laser training for hospital surgical departments.

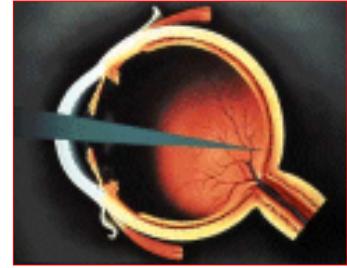
Curricula Vitae available at <http://www.lasertraining.org/Administrative/Library/LittleCV.htm>
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Other Qualified Faculty as announced from time to time.

HANDS-ON LAB INSTRUCTOR: Besides Greg or Dan, will include Jessica Absten of Professional Medical Education Assn – a Certified Medical Laser Safety Officer.

WHY ATTEND?

- Earn the ANSI Recommended Professional Credentials of Certified Medical Laser Safety Officer (CLSO/M)
- Familiarize yourself with ANSI 136.3 Laser Standards
- Great for Staff turnover and staying current
- This is the MAINSTAY SURGICAL LASER TRAINING PROGRAM in the United States
- Courses consistently rated excellent by past attendees
- 16.1 Nursing Credits, or more for the hands-on option
- Physicians can meet the Laser Biophysics and Safety requirements for credentialing
- Ensure your compliance with OSHA and JCAHO - You MUST have a Laser Safety Officer
- Learn about NCLC Laser Certifications for Medical Laser Safety Officers
- Obtain all the teaching materials we provide at the course so you can go home and train YOUR staff, including Laser Airway Safety.



REGISTER ONLINE AT WWW.LASERTRAINING.ORG

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".

