

LIA

TODAY

VOLUME: 28 NO: 4 | JUL/AUG 2020

LIA'S CHARITY
INITIATIVES

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QUESTIONS ON
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BLS: IMPROVING
PHYSICIAN LASER
PRIVILEGING IN
HEALTHCARE
FACILITIES

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LIA TODAY

THE OFFICIAL NEWSLETTER OF LIA

LIA TODAY is published bimonthly to educate and inform students and professionals of challenges and innovations in the field of photonic materials processing.

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LIA'S CHARITY INITIATIVES

Interview with Roni Henderson, LIA

In this interview with Roni Henderson you can learn about LIA's new charity initiatives and get an update on LIA's *Run with the President in Memory of Bill Shiner*.



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QUESTIONS ON QUARANTINE

Interview with Jim Pearsons, UCF CREOL, FPC

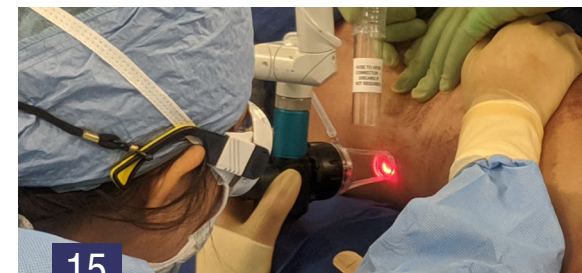
Interview questions from LIA on the effects of COVID-19 and the resulting quarantine on the members of the Florida Photonics Cluster, as well as other companies in the industry.



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RESPIRATORY PROTECTION VIDEO AVAILABLE NOW FROM OSHA REGION VI EDUCATION CENTERS

OSHA Region 6 Education Centers offers a free video to learn more about respiratory protection and its role in the COVID-19 pandemic.



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BLS: IMPROVING PHYSICIAN LASER PRIVILEGING IN HEALTHCARE FACILITIES

By Deirdre H. Elder, CMLSO

Certified Medical Laser Safety Officer Deirdre Elder discusses laser privileging and shares questions that should be asked in every medical facility that uses Class 3B and Class 4 lasers.

The acceptance and publication of manuscripts and other types of articles in LIA TODAY does not imply that the reviewers, editors, or publisher accept, approve, or endorse the data, opinions, and conclusions of the authors.

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LIA Laser Safety Trainings

LASER SAFETY OFFICER TRAINING

Orlando, FL

Jan. 22 - 24, 2020

Orlando, FL

May 27 - 29, 2020

Orlando, FL

Aug. 19 - 21, 2020

Orlando, FL

Dec. 2 - 4, 2020

LASER SAFETY OFFICER WITH HAZARD ANALYSIS

Orlando, FL

Jan. 27 - 31, 2020

Orlando, FL

Jun. 1 - 5, 2020

Orlando, FL

Aug. 24 - 28, 2020

Orlando, FL

Dec. 7 - 11, 2020

MEDICAL LASER SAFETY OFFICER TRAINING

Orlando, FL

Jan. 25 - 26, 2020

Orlando, FL

May 30 - 31, 2020

Orlando, FL

Aug. 22 - 23, 2020

Orlando, FL

Dec. 5 - 6, 2020

Visit www.lia.org for all course and event listings

Course Highlight

LASER SAFETY OFFICER TRAINING ONLINE - ANYWHERE, ANYTIME

As a Laser Safety Officer, you have one of the most important responsibilities in your organization - to uphold the highest standard of laser safety. Your commitment to safety prevents injuries. Your enforcement of safety policies isn't always easy, but you know the consequences otherwise. It is this persistent motivation that protects your team and makes a difference.

As you know, the laser field changes at a rapid pace. That's why it's so important to stay on the leading-edge of safety training and advancement, especially in the role of Laser Safety Officer. Considering all of your responsibilities, we've made it a little easier to stay on the forefront of laser safety. LIA's most popular training program for the Laser Safety Officer is now offered over the Internet in a convenient, easy-to-use online course format.



Gilbert Haas
LIA President 2020

Speaking of ICALEO, I would like to thank our registration sponsor Trumpf for making this event free of charge to all attendees. Please pass the word. We are hoping for a record attendance which will enhance and open the conference to those otherwise unable to attend. In addition, we are looking to build on this to expand the conference and its attendance for a day in the future when we can all meet in person and get together again as in the past.

Be well and stay safe.

PRESIDENT'S MESSAGE

Given the current COVID times, depending on what geography you reside in, many are starting to see the situation starting to plateau and slowly wind down. While we are all certainly looking forward to the latter, it may still be a while until we are on track to a healthy recovery.

During the past couple months, the LIA By-Laws update committee, consisting of Nathaniel Quick, Paul Denney and me, have been working hard to finalize the needed up-dates we have been working on over the year. The new updates are needed so the LIA and its governance can function, operate legally, remotely and unrestricted through today's COVID times. The proposed update is designed as a "first-round", with a second up-date scheduled next year to evolve the By-Laws further. It is with our hope the new By-Laws updates will be accepted and voted in by the current Board of Directors so we can move forward with the fall elections and the first remote LIA annual meeting during the virtual ICALEO.



Nat Quick
Executive Director

EXECUTIVE DIRECTOR'S MESSAGE

As the impact of COVID-19 continues, LIA is adjusting to new ways of doing business. Preparations for the "virtual" conference experience of ICALEO 2020 are progressing well. We would like to thank all chairs and presenters for their contributions and for complying with the new paper presentation procedures. I would also like to thank our registration sponsor, Trumpf, whose contributions have made ICALEO 2020 free of charge to all attendees. You can register to join us in October at icaleo.org/attend. Using this year and its unexpected opportunities, we hope to build on this virtual experience by using a hybrid "virtual and person-to-person" conference format in the future. This will allow us to expand the conference and accommodate a wider audience.

A team comprised of Gil Haas, Paul Denney, and I have been updating the LIA By-Laws to ensure that LIA's governance can function more efficiently and operate legally, remotely, and unrestricted in potentially hazardous conditions, such as this pandemic. This first round of updates will be voted on by the current Board of Directors.

Please join me in congratulating Dr. Robert Thomas as a recipient of the Air Force Research Laboratory (AFRL) 2020 Fellow. Bob has been an extraordinary supporter of the laser safety community, including BLS and LIA. He is an LIA past president, Fellow, and currently serves on our Board of Directors. Kudos!

Dr. Thomas's recognition reminds us that nominations are open for LIA Fellow, as well as all award categories, and for the Board of Directors.

In this issue, you can expect a brief update on how other companies in the industry are dealing with the pandemic in an interview with Jim Pearsons, the head of the Florida Photonics Cluster. In another interview with Roni Henderson and Steven Glover of LIA, you can learn about our new charity initiatives and get an update on LIA's Run with the President in Memory of Bill Shiner. In the BLS Newsletter, read about improving physician laser privileging in healthcare facilities in an article written by CMLSO Deirdre H. Elder.

Stay safe and keep others safe.

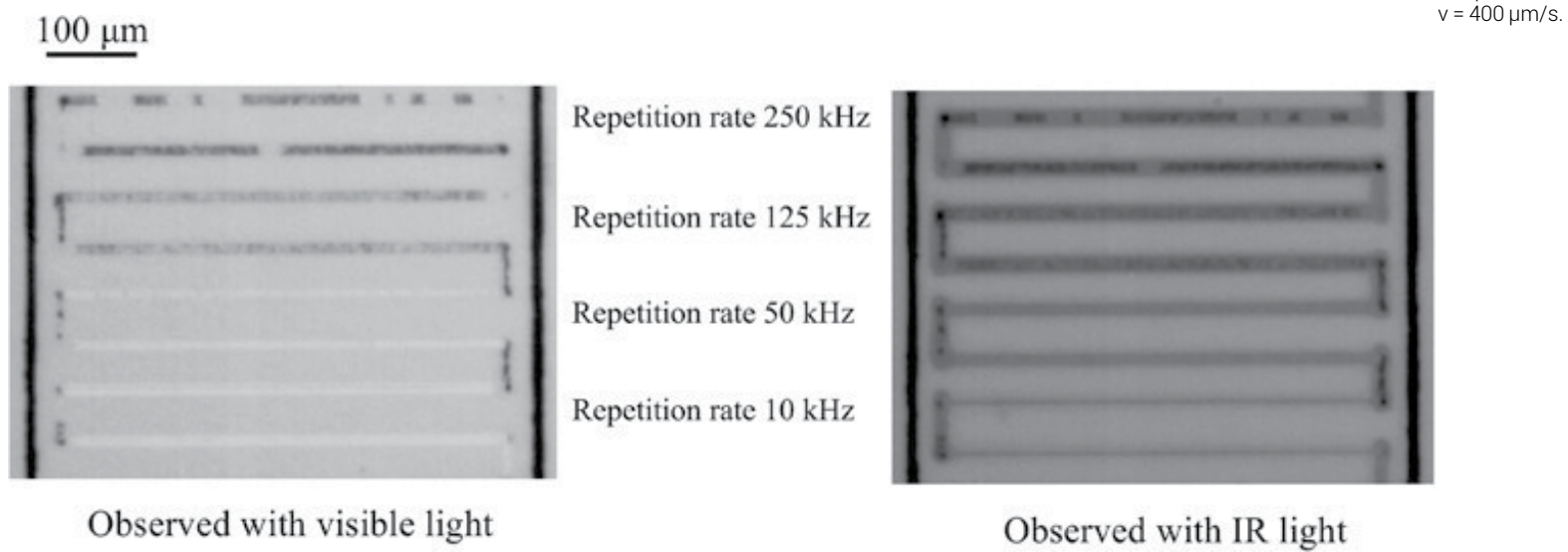


Fig. 9. Microscope images observed with visible (left) and IR (right) wavelengths showing the effects of f on the processed lines. The scan speed was $v = 400 \mu\text{m/s}$.

MICROMACHINING OF THE BACK SURFACE AND INTERIOR OF SI USING INFRARED FEMTOSECOND LASER PULSES

By: Khanh Phu Luong, Rie Tanabe-Yamagishi, Noboru Yamada, and Yoshiro Ito

Abstract: This paper reports the 3D microprocessing of Si using a femtosecond laser at a wavelength of 1552.5 nm. As Si is optically transparent at this wavelength, the authors attempted to machine the back surface and interior of a Si substrate by a nonlinear absorption process, similar to the nonlinear process used to treat dielectric materials using visible and near-infrared ultrashort lasers. The femtosecond laser impinged on the front surface while focusing at or near the back surface. The authors scanned the laser beam linearly at several focus positions across the back surface at different scan speeds and repetition rates. Changes occurring in the interior of Si were observable only by infrared microscopy, whereas those on the back surface were observable by visible optical microscopy and scanning electron microscopy. Meanwhile, no change was detected on the front surface where the laser impinged. After a certain period, the point of irradiation showed changes; afterward, changes in the interior of Si began

to occur continuously. However, the changes on the back surface occurred in a rather discrete manner, observed intermittently. This may be attributed to the heat accumulation due to multiple pulse irradiations, which increased the local temperature. This resulted in increased absorption along the incident laser path and prevented the delivery of a sufficient amount of energy to induce ablation on the back surface. The morphologies observed on the altered back surface were a granular band and a laser-induced periodic surface structure.

Journal of Laser Applications 32, 012017 (2020); <https://doi.org/10.2351/1.5123309>

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<https://lia.scitation.org/journal/jla>

TRENDING IN THE NEWS: LIA'S TOP 4 ARTICLE PICKS

1

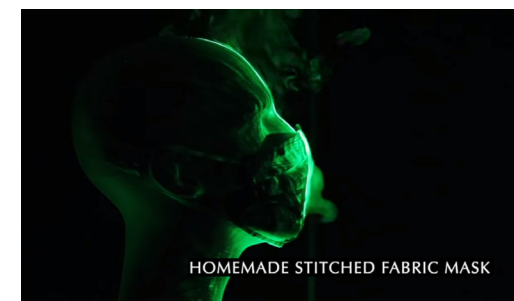


PROJECT CREATES MORE POWERFUL, VERSATILE ULTRAFAST LASER PULSE

University of Rochester researchers are setting a new standard when it comes to producing ultrafast laser pulses over a broader range of wavelengths than traditional laser sources.

[Read more](#)

2

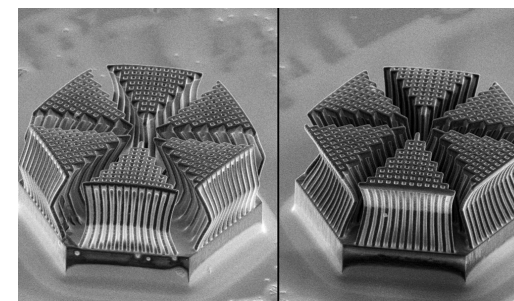


LASERS REVEAL HOW WELL DIFFERENT TYPES OF FACEMASKS WORK

Researchers are using lasers to reveal how effective different kinds of DIY masks are at blocking tiny droplets from coughs and sneezes.

[Read more](#)

3

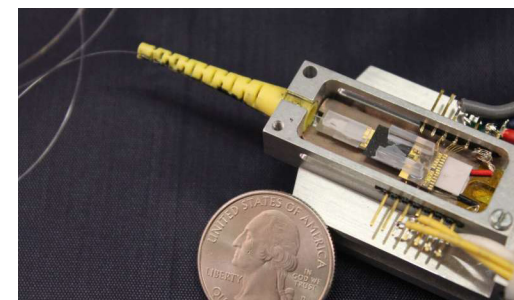


MAKING MICROSCALE STAMPS WITH LASERS

A team of researchers from Sandia National Laboratories, demonstrated precise, porous stamps using multiphoton lithography (MPL) to engineer ink transfer in relief printing.

[Read more](#)

4



FROM CUSTOM-BUILT TO READY-MADE PHOTONICS

A collaboration between UC Santa Barbara, Caltech, and EPFL has led to the simplifying and condensing of a complex optical system onto a single silicon photonic chip.

[Read more](#)

LIA's Charity Initiatives

In this interview with Roni Henderson you can learn about the start of LIA's new charity initiatives and how they plan to continue these charitable events in the future. You can also get an update on the virtual run that is a part of this year's virtual ICALEO conference, LIA's Run with the President in Memory of Bill Shiner.

Tell me about the thought behind LIA's new charity initiative.

We usually have a laser running club that meets at our ICALEO conference every year and starts the day with a run in whatever city ICALEO is taking place that year. ICALEO 2020 had to go virtual so we put our heads together and wanted to come up with a way to continue with the tradition of the running club but in a virtual platform. Then we thought, why not take it a step further and make it a charitable event and raise some money for a really good cause, the American Cancer Society. We chose this particular charity in memory of Bill Shiner, who passed away from cancer this year. In honoring the family's wishes this event will raise money in support of the American Cancer Society.

Who is Bill Shiner and how did he inspire this year's charity event?

Bill Shiner was a founding member of LIA and served on the Board of Directors for over 40 years. He was LIA president in 2007 and in 2009 awarded the LIA President Award for his many years of support and contribution to the success of LIA. Bill was a huge figure in the laser industry and stayed active until the end because of his love and knowledge that the lasers will continue to be a big part of our future.

If you want to learn more about Bill Shiner, his life, and his impact on our community, you can read an article written by a friend of his, Ronald Schaeffer, in the [LIA Today May/June issue](#).

How exactly does it work?

Register for the campaign, [LIA's Run with the President](#)

– [Supporting American Cancer Society in Memory of Bill Shiner](#). Easily set up your device (Fitbit, Garmen, Apple watch, Google Fit, Misfit, Strava) or, download the Charity Footprints app. Share your story and raise funds and awareness. Track workouts anywhere and anytime, you can run or walk, then try to meet your goal.

Why a run? How did the LIA Laser Running Club get started?

You don't have to necessarily run, I do not plan on running. Just your everyday movement can count towards your distance! You have a goal of a certain amount of miles that you set for yourself but you do not have to do them all at once.

A lot of our ICALEO attendees are very health conscious and exercise is a big part of their lives. The LIA Running Club was started by Klaus Loeffler with TRUMPF. Running was one of his passions and he was even on the German National Team! Many years ago at ICALEO some attendees got together to get the blood pumping and get motivated before a long day of important laser industry information. In 2013 when Klaus was President of LIA, the running club became official and was a part of the ICALEO program.

It was kind of a bonding time with some of our ICALEO people. In an interview from a previous ICALEO, Loeffler was even quoted saying, "ICALEO has a lot to offer in terms of networking. You could start early in the morning by attending the running club. Believe me - at the end of the run you have at least 20 new friends from the laser business." Although we are not able to meet in person this year, we are trying to keep this same energy going through this virtual run until we are able to meet again in person.

What are your goals with this charity event?

Our goal is to connect with others in our industry and remember the life and impact of Bill Shiner. We hope to raise money and awareness for the fight against cancer by meeting our overall run goal of completing 10,000 miles and raising \$20,000 collectively for the American Cancer Society.

Why should LIA members be encouraged to support/join?

It is a way for the laser community to stay active and engaged with each other while everything is virtual and most people are still working from home, still not able to go to gyms, etc.

If you don't feel like joining the run as a participant but still want a way to support, you can raise awareness of the event or even donate. Everyone I know, and I am sure most everyone you know as well, has in some way been affected by cancer. The only way we are ever going to fight this horrible disease is by doing research and then more research. The American Cancer Society has been heavily affected by the pandemic and many of their fundraising efforts were unable to be completed. They desperately need support in order to continue to fund research that hopefully one day will make sure that no one else is lost to this terrible disease.

This run is the charity event leading up to this year's ICALEO, but will we be seeing more charity events in the future? What are some charities we can expect to see supported by LIA? How do you expect events like these might benefit the laser community?

We are always open to looking to help meet the needs of the industry, but we do have some areas to focus on. LIA really wants to get into some charitable events for students. They are our future! Maybe some scholarships for students going into the optics field to help with tuition, books, and/or housing.

Thank you for your time. I look forward to seeing what impacts LIA has with future charity events!

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A Virtual Conference Experience

ICALEO 2020 is a fully virtual conference experience with innovative presentations from all over the world in tracks such as Laser Additive Manufacturing, Laser Materials Macroprocessing, Laser Materials Microprocessing, Laser Nanomanufacturing, and Frontiers in Laser Applications. Attendees will experience interactive sessions on Monday and Tuesday, then starting Wednesday the presentations will be available on demand. [For more information visit: www.icaleo.org](http://www.icaleo.org).

A big thank you to our registration sponsor TRUMPF, who has covered your registration costs this year to make the event **free of charge** for all attendees!

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OSHA Region 6 Education Centers Offers Free Video to Learn More about Respiratory Protection and its Role in the COVID-19 Pandemic

Since the onset of the COVID-19 pandemic, respiratory protection has become a topic of utmost importance. COVID-19 is an illness caused by a virus that can spread from person to person. Because the virus can be transmitted through respiratory droplets, respiratory protection plays a critical role in stopping the spread of the illness.

Businesses and employers can prevent and slow the spread of COVID-19 in the workplace by following the guidelines set forth by the CDC. To accomplish this, employers are instructed to consider implementing activities that prevent and reduce transmission among employees, maintain healthy business operations and maintain a healthy work environment. To protect

workers, employers must think about preventing the spread of COVID-19 and providing workers with the right protective equipment.

A new webinar developed by the Region VI OSHA Training Institute Education Centers offers guidance on the proper implementation of a respiratory protection program and its relationship to the current pandemic. The webinar is intended to raise awareness among both employers and workers about the hazards of COVID-19 and the need and proper use of respiratory protection.

The one-hour video focuses on the following topics:

- What is COVID-19?
- Respiratory Protection
- Respirator Written Program Requirements

- Education and Training
- Tools and Resources

*The video is free of charge and is now available! Please register to receive a link to the video by completing the form on the linked page below.

NOTE: Once registered, you will receive an email with instructions and a password to access the video.

If you do not receive the email or you have any additional questions, please contact us at 877-345-2515.

[CLICK HERE TO REGISTER](#)

Questions on Quarantine

Steve Glover, LIA interviews Jim Pearson, UCF-CREOL, FPC - 7/31/2020.



Interview questions from LIA on the effects of COVID-19 and the resulting quarantine on the members of the Florida Photonics Cluster, as well as other companies in the industry.

Steven Glover (LIA): How have you been doing during the quarantine?

Jim Pearson (FPC, UCF): I am doing fine, as are all my family. We are doing all we can to follow the stay-at-home rules that have been in place in Georgia. We plan to continue this even as the Georgia governor opens things up – a bit too early in my opinion.

SG: From your perspective how has this changed the way people have been working?

JP: I do most of my work for the Florida Photonics Cluster trade association and for UCF/CREOL from my home office in Georgia. So the way I get my professional work done hasn't changed much. But it's been difficult for companies I am familiar with, although most I think have been able to continue at least some operations.

SG: What aspect of the quarantine has had the most negative impact and in what way?

JP: I think the biggest negative impact has been on manufacturing operations, both in-house and the supply chain for parts and materials. Although I haven't heard much about it from photonics companies, I expect marketing and sales operations have also been hurt since those also require a good bit of in-person and face-to-face contact like most manufacturing operations. Everyone is working hard to adapt to the new way of getting things done.

SG: I have been reading about a number of companies who have started manufacturing various items to help with the shortages we are experiencing. Can you talk about some of the things FPC members are doing to help with the pandemic?

JP: I have not heard that FPC members are manufacturing items to deal with the shortages.

SG: Are you aware of any other companies in our industry outside of FPC members that are helping out?

JP: No, only what I hear occasionally on TV news. An example is this collaboration with NIST and UMD Med School that is using hyperspectral imaging to investigate the prognostic value of rashes from COVID-19. Read about it here:

<https://www.bioopticsworld.com/biophotonics-techniques/article/14177264/hyperspectral-imaging-to-help-in-study-of-prognostic-value-of-covid19-rash>

SG: Do you know of any other ways that companies in our industry might be able to help right now?

JP: Finding ways to use light to activate virus-killing materials that can be safely put into the body is easy to say, but a challenge to find funding for it and to prepare sufficient safety conditions for testing within their laboratories. Some companies may be able to covert some of their equipment like 3D printers to make PPE items.

A few photonics companies are involved with developing a faster means for the antibody diagnostic, like this one in Canada:

<https://www.bioopticsworld.com/biophotonics-tools/article/14174260/spartan-bioscience-receives-health-canada-approval-for-fast-portable-covid19-test>

SG: Are you aware of any photonics research that could be used in preventing future pandemics? If so are any FPC members involved in that?

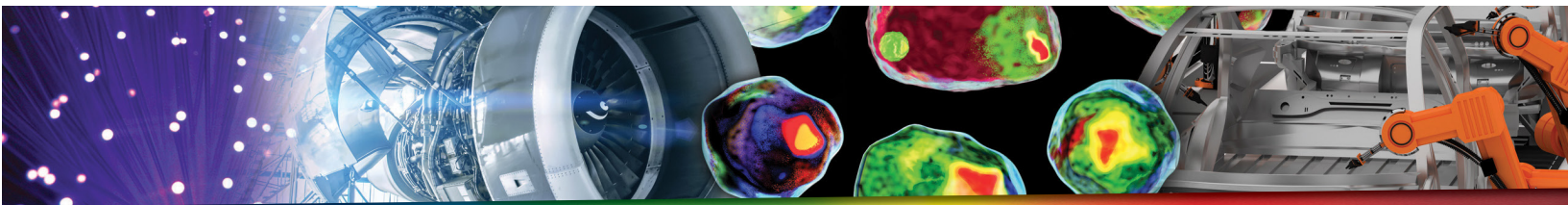
JP: I'm not aware of any ongoing research in this area, but in my opinion, it is an important area for research funding now and in the future.

SG: Do you have any advice for those of us staying safe at home?

JP: Follow the social distancing guidelines rigorously. Get some face masks and always wear one when you have to leave your house to get some essential items. Use something to cover your hand(s) when touching things in other locations like gasoline pump handles or even bags you are given at a store you have to go to. Don't assume you are OK going back to the way we used to do things in spite of what some of our government leaders are saying. Support any possible funding for research to develop a vaccine and a treatment for COVID-19.

Additional Notes: The Florida Photonics Cluster recently sent out a survey to their members to determine how to best support them in the time of this pandemic. Responses showed that the large majority of companies were seeing a change in their production or operations due to COVID-19. Many companies have been able to switch to remote work or limit office visits to continue business as well as they can. One company even said they began producing PPE materials such as masks.

If you are interested in sharing the story on what your company is doing for our industry during these times, please contact marketing@lia.org.



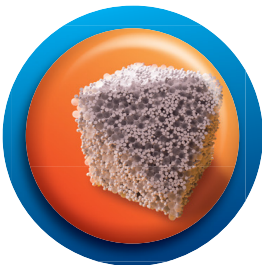
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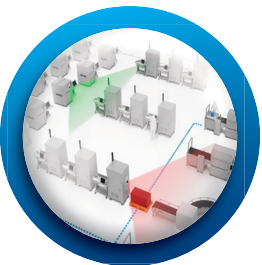
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NEWSLETTER

Volume 1 • Issue 4



Certification Maintenance Tip!

You can earn BLS Certification Maintenance points by reading laser-related peer-reviewed academic journal articles. Points for journal article reading are claimed in Category 9, Other Activities. Record your reading using the Journal Article Verification Worksheet and have it signed by your supervisor. Attach it to your Certification Maintenance Worksheet as evidence of completion.

You can earn 0.25 CM points per hour of reading for a maximum of 2.0 CM in Category 9. Visit our website for details.

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Paper-and-Pencil Exam Administration

The pencil-and-paper exam scheduled to be offered prior to the LSO course scheduled for December. Date and location will be posted on the BLS website. Computer-based testing has resumed in most of our third party test administrator's testing facility. For computer-based testing contact visit www.lasersafety.org, or contact us at bls@lasersafety.org

CLSO Exam Reference Guide Now Available



Updated CLSO Exam Reference Guide is now available. The guide includes test taking tips, practice questions, and a detailed breakdown of the exam areas of practice. This guide is available to download for free on the BLS website. www.lasersafety.org

ANSI Z136.5-2020 For Safe Use of Lasers in Educational Institutions

The ANSI Z136.5-2020 standard provides reasonable and adequate guidance for the safe use of lasers in educational environments by evaluating and minimizing hazards associated with laser radiation.

Environments characteristic of educational institutions, wherein lasers may be found, include teaching laboratories, classrooms, lecture halls, science fairs, museums, and student projects on-and-off campus. This standard is intended for faculty and students using lasers at primary, secondary, and college levels of education, excluding graduate level research laboratories that are more comprehensively addressed by ANSI Z136.8 (latest revision) and Z136.1 (latest revision).

Check the LIA website for more information www.lia.org

Write for BLS!

Looking for a way to earn BLS CM points for free? BLS has restarted it's newsletter and is inviting CLSOs and CMLSOs to share laser safety knowledge with the laser community! Published article submissions are worth 0.5 BLS Certification Maintenance (CM) points in Category 3. For more information on guidelines and regulations, email us at bls@lasersafety.org. Check out one of our submissions on the next page!

Improving Physician Laser Privileging in Healthcare Facilities

by Deirdre H. Elder, DABHP, CMLSO



About the Author - Certified Medical Laser Safety Officer

Deirdre Elder is a Certified Health Physicist and Certified Medical Laser Safety Officer with twelve years of experience. She is the Radiation Safety Manager for UCHHealth and serves as the Radiation Safety Officer and Laser Safety Officer for University of Colorado Hospital and other facilities within the system..

Who uses medical lasers in your institution? How do you know the provider is qualified? These are questions that should be asked in every medical facility that uses Class 3B and Class 4 lasers.

The Challenge

There is currently a lot of variation in the specificity of laser privileges and the requirements for them to be granted, even within an institution. In a non-scientific survey conducted by the author, twelve academic medical centers, six community hospitals and one military hospital responded to questions regarding the laser privileging process. Three of the nineteen facilities grant core privileges for "use of lasers" or "laser surgery" to all physicians within a specialty. Four facilities have privileges based on the laser type and wavelength [e.g. CO₂ laser (10,600 nm) or Nd:YAG laser (1064 nm)]. Three have very specific privileges that indicate the type of laser and the procedure for which it can be

used. For example, Ophthalmology may have privileges for Nd:YAG laser capsulotomy and ArF Excimer photorefractive keratectomy, while Cardiology may have a privilege for XeCl Excimer laser atherectomy. Nine of the facilities had a mixture of laser privileges that differed by specialty.

There is also variation in the requirements for physicians to be granted a laser privilege. Only 63% of the facilities required providers to complete laser safety training and 68% required documentation of training and experience.

Once laser privileges are granted initially, 53% automatically grant them at each reappointment. Only 47% require documentation of a minimum number of cases with each laser, with good outcomes, to renew the privileges.

Standards, Guidelines, and Regulations

What is the best process to ensure patient safety and to protect the provider and facility? Let's begin with a review of the requirements in the American National Standard for Safe Use of Lasers in Health Care (ANSI Z136.3-2018). In section 5.2.1, laser safety training is required for health care personnel including laser users and laser operators and 5.2.2 indicates, "Retraining programs should be provided [...] not less frequently than every five years for laser users, laser operators" and other personnel. Section 5.2.3 states that "All certification and credentialing processes at the

facility [...] shall require training in the safe use of lasers, as well as the maintenance of a safe environment [...]."

The Association of periOperative Registered Nurses (AORN) also provides guidance regarding the safe use of surgical lasers. AORN indicates that the laser safety committee responsibilities should include "establishing requirements for credentialing" and "verifying that any physician who operates a laser has completed the health care organization's required education on the operation and safety precautions and course work in basic laser physics, laser-tissue interaction, and clinical applications for the specific laser for which privileges are sought." (AORN 2017)

The Joint Commission (TJC) defines credentialing as "the collection, verification, and assessment of information regarding three critical parameters; current licensure; education and relevant training; and experience, ability, and current competence to perform the requested privilege(s)." TJC indicates that "core/bundled privileges must clearly and accurately define the specific activities/procedures/privileges to be included the core/bundle and reflect only activities/procedures/privileges performed at the organization from which privileges have been requested." The Centers for Medicare & Medicaid Services (CMS) requires that "the hospital's Governing Body must ensure that all practitioners who provide a medical level of care and/or conduct surgical procedures



Image of a CO₂ laser.

in the hospital are individually evaluated by its Medical Staff and that those practitioners possess current qualifications and demonstrated competencies for the privileges granted.”

Recommendations

To comply with ANSI Z136.3-2018, AORN guidelines, TJC standards, and CMS regulations, healthcare facilities need to ensure that providers who use lasers have documented training and experience with the lasers they will use before granting laser privileges. Privileges should be specific to the laser(s) to be used, and the facility needs to have a process for ensuring retraining in laser safety at intervals not to exceed 5 years and evaluation of continued competency.

Ideally, provider privileges would be very specific as to the laser used and the procedure that is performed with the laser (e.g. Nd:YAG laser capsulotomy or Ho:YAG laser lithotripsy). However, the list of specific laser privileges could be quite long. For this reason, many facilities grant privileges for procedures and laser use separately. Physicians may have core privileges to perform typical procedures and then special privileges for the use of specific laser(s). At my facility, providers can request privileges from a list that includes 13 different lasers from the ArF Excimer laser with a wavelength of 193 nm

“Physicians should be required to submit documentation of training and experience with each laser for which privileges are requested.”

to the CO₂ laser with a wavelength of 10,600 nm. There are separate privileges for each wavelength of diode laser.

Physicians should be required to submit documentation of training and experience with each laser for which privileges are requested. The facilities in which I work require 2 cases during the previous two years, but some facilities require up to 5 cases and/or allow up to 5 years. Training in laser safety and maintaining a safe environment should be required at initial credentialing and periodically. While ANSI Z136.3 allows up to 5 years, our credentialing committee decided to require retraining

at each reappointment (every 2 years) to renew laser privileges. We have four different laser safety training modules available through our computer-based learning system so providers complete training that is relevant to the setting in which they work and the types of lasers they are likely to use.

If your facility currently has very generic laser privileges and/or does not require any documentation of training and experience, I recommend that you start a conversation with physicians who use lasers, medical credentialing staff and facility administration to discuss the gaps in the current program and best practices that can be implemented. I recruited physician champions and worked with them and medical staff office personnel to develop the policy for laser privileges. We then presented it to the credentials committee and then the medical board.

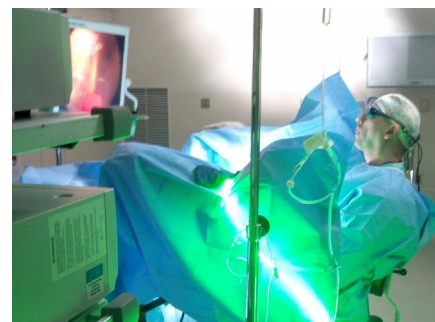


Image of a greenlight laser.

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About BLS



The mission of the Board of Laser Safety (BLS) is to provide a means for the recognition of laser safety professionals through certification and to promote competency in the field of laser safety. BLS certification will enhance the credibility of a designated Laser Safety Officer, and demonstrate that individuals serving in the field have agreed to adhere to high standards of safety and professional practice. For the employer, having a CLSO or CMLSO on staff demonstrates due-diligence and helps to ensure legitimacy and adequacy of the laser safety program, validating the company's dedication to a safe working environment for all employees.