

# Core Strategies for Systemic Inflammation and Chronic Pain

Northwestern Health Sciences University

DATE: Jan 15-16, 2022

HOURS: 12

LOCATION: Nashville, TN

INSTRUCTORS: Andre J. Camelli, DC

SATURDAY

8am-5:30pm

- 8:00-9:00** Intro to basic laser and basic physiology of photobiomodulation. (Laser)
- 9:00-10:00** Understanding Dysfunctional Mitochondria, Increased Oxidative Stress, Accelerated Aging, LLLT Role in improving the function of Mitochondria. (Laser)
- 10:00-10:45** Basic evaluation, anatomy, and neurology of laser applications for FDA clearance on low back pain. (Laser)
- 10:45-11:00** Break
- 11:00-12:30** Low back pain treatment demonstration. Review the FDA clearance study on low back pain including patient positioning on the treatment table, laser frequency, duration, and positioning. (Laser)
- 12:30-1:30** Lunch Break
- 1:30-2:30** Basic Laser Functions, Hands-On Workshop and Demos for Low Back and Lumbar plexus. We will perform and score neurological integrity and muscle strength associated with the related nerve roots L1-2-3-4-5 & S1. Muscle Strength will be graded on a scale of 0-5 Muscles tested will be iliopsoas, quadriceps, hamstrings, tibialis anterior, and gluteus maximus Laser placement for nerve root applications will be shown for the above referenced nerves. (Laser)
- 2:30-3:00** Basic evaluation, anatomy, and neurology of laser applications of plantar fasciitis, chronic heel and foot pain. (Laser)
- 3:00-3:45** Plantar fasciitis, chronic heel and foot pain treatment demonstrations and hands on foot and ankle workshop. (Laser)
- These sections will include a review of FDA clearance study on laser placement for the treatment on plantar fasciitis, patient placement, and discussion of dorsal pedal blood flow, volume, and perfusion.
- 3:45-4:00** Break

**4:00-4:30** Understanding Neuroinflammatory Cascades, Gliosis, and Cognitive Decline. (Laser)

**4:30-5:00** LLLT applications to downregulate NF Kappa Beta and other epigenetic triggers of neurodegeneration. (Differential/Physical Diagnosis)

**5:00-5:30** Strategies & Protocols for Brain Support  
This section will include research on cold laser applications on the brain, trans cranial penetration of photons, blood volume, ATP production. Workshop and Demo will include laser placement, power output, wavelength, and frequency. (Laser)

**SUNDAY**

**8am-12:15pm**

**8:00- 9:00** Chronic Neck and Shoulder Pain evaluation, and treatment demonstration.  
This section we will perform and score neurological integrity and muscle strength associated with the related nerve roots C5-6-7-8 & T1. Muscle Strength will be graded on a scale of 0-5 and muscles tested will be deltoids, biceps, triceps, finger flexion, abduction, and grip strength. Laser placement for nerve root applications will be shown for the above referenced nerves. (Differential/Physical Diagnosis)

**9:00-10:45** Basic Violet Laser Applications and Demo  
This section will discuss the differences between 635nm and 405nm  
Demo will include treatment duration differences between these two. (Laser)

**10:45-11:00** Break

**11:00 -12:15** FDA Cleared Non-Invasive Laser Treatment for Fat Lipolysis, Business Model and Smooth Integration of Lasers into Your Practice followed by questions and review of material. (Laser)