

Agenda

- Day 1 – **Saturday, 24 May 2025 | 8:30am – 6:00pm**
 - 8:30am: Registration/Coffee Tea on Arrival
 - 9:00am: Workshop Start
 - 10:30am: AM Tea (15 mins)
 - 12:15pm: Lunch (45 mins)
 - 3:00pm: PM Tea (15 mins)
 - 5:00pm: Welcome Reception
- Day 2 – **Sunday, 25 May 2025 | 8:30am – 3:00pm**
 - 8:30am: Registration/Coffee Tea on Arrival
 - 9:00am: Workshop Start
 - 10:30am: AM Tea (15 mins)
 - 12:15pm: Lunch (45 mins)
 - 3:00pm: Workshop Finish

Course Description:

This comprehensive seminar focused on performance enhancement and injury recovery strategies that encompass both brain and body health. From childhood to the golden years, this seminar will provide a blueprint for optimizing health at each stage of life for everyone ranging from elite athletes to non-athletes. Through laser techniques, neuro-recalibration protocols, nutrition integration, and hands-on workshops, attendees will gain valuable insights and skills to enhance their practice and differentiate themselves in a competitive market.

Learning Objectives

- Doctors will learn protocols that are easy to implement yet get enhanced outcomes for neck and back injuries, shoulder injuries, knee injuries, foot and ankle, neuropathies, concussions, neurodegeneration, disc injuries, golf and tennis elbow, and more
- Learn Protocols to enhance sports performance by optimizing muscle strength and finding hidden weaknesses in muscles, balance, coordination, eye tracking, etc. Doctors will learn in workshops how to quickly change the strength of a weak muscle with high energy visible wavelength lasers.
- Learn the differences between high power and low power lasers, high photonic energy and low photonic energy wavelengths, how the color of the laser affects the treatment goals and outcomes, and what are the optimal lasers to use for different conditions.
- Learn how to enhance the function of the mitochondria to make ATP, and how each color laser has unique, wavelength specific effects on each step in the process of the electron transport chain.
- Learn a simple to implement point and shoot system for common injuries that is effective and that doctors can implement on day 1 in a manner that is hands free and does not require them to be in the room with the patient for the whole treatment time.
- Learn an advanced yet simple to implement “neuro-recalibration” protocols for the upper and lower extremities, cervical and lumbar spine, cranial nerves, and gait, that can enhance sports performance and everyday activities of daily life performance. This method changes function so quickly that patients are excited to share their results with their friends and family to generate more referrals for your office.

- Learn off label uses for the laser from the secondary effects of the laser on the gut, microbiome, immune system, inflammatory markers, stem cells, and brain derived neurotrophic factor along with vascular endothelial growth factor. Doctors will see changes on patient's lab tests.
- Learn protocols to rapidly change surgical scar sensitivity even in very old surgeries, to change hypersensitivities to touch or pain or pressure, and how to evaluate if a scar is affecting muscle strength and ROM and laser techniques to quickly change both for enhanced function.

Program Outline:

Part 1

Laser Myths and Misconceptions vs Objective Realities. PLUS Cervical spine technique hands on workshop (Dr. Kirk Gair)

- Modern Research since the 1960s, and it's use as state standard medical care in Russia since 1974 and their findings for best wavelengths and powers.
- Lasers vs NSAIDS and Opioids and laser superiority in long term results
- What conditions peer reviewed research has shown laser to be effective for, and what are the wavelength, and frequencies with the best outcomes to create 20 FDA clearances for visible wavelength low powered lasers
- What is the difference between violet, green, red, and infrared lasers, high vs low power
- Depth of penetration vs signaling cascades and electron transport. How this can cause the violet laser to have the furthest reaching impacts on tissues and why
- The latest research on lasers, including how some wavelengths have enough energy per photon to trigger electrons to jump to higher energy states and create millions of reactions
- Where the research is going: Autism, Parkinson's, Alzheimer's, Low Back, etc.
- How do we know it's not just a placebo? Case studies with fractures, athletes, and animals.

Part 2

Cervical and Upper Extremity Injuries and How to Recalibrate and Reset the nervous system with the accelerate recovery and enhance performance (Examination Procedures/Diagnostics) (Dr. Kirk Gair)

- Research studies on cervical spine, shoulder injuries, elbow, and carpal tunnel and laser photobiomodulation
- Muscle assessment techniques that utilize standard Hoppenfield muscle tests but using them to look for subtle weaknesses and using the improvements after laser as an outcomes assessment.
- Pre and Post Op protocols including passive point and shoot techniques with the laser and protocols doing active muscle rehabilitation and scar tissue reduction techniques.

- Protocols for chronic pain after surgery including laser treatment times, areas of application, pulse frequencies, and appointment frequencies.
- Unique protocols for violet or green wavelengths and how those higher photonic energy wavelengths have different cellular impacts compared to lower energy red and infrared wavelengths and how that affects expected treatment outcomes.
- Case studies from Dr Gair's Patients that showcase evaluation, diagnosis, creating a treatment plan, and how to objective assess improvements.
- How cervical movements affect muscle strength and laser protocols to recalibrate and reset. Here the doctors will be shown how to perform Hoppenfield muscle tests while the patient holds a specific cervical position and what the change in strength means and how to treat any discovered weakness
- Laser shoulder protocols, elbow, and hand protocols that include how to assess the joint, how to choose passive vs active rehab laser protocols, and which wavelength color combinations are the most effective.
- Percussor techniques and Adjustor tool techniques for these conditions

Part 3**Lumbar spine and Lower Extremity Injuries and How To Recalibrate and Reset the nervous system to accelerate recovery and enhance sports performance (Examination procedures/Diagnostics) (Dr. Kirk Gair)**

- Research studies on lumbar spine, hip, knee, and ankle injuries and
- Muscle assessment techniques that utilize standard Hoppenfield muscle tests but using them to look for subtle weaknesses and using the improvements after laser as an outcomes assessment
- Case studies from Dr Gair's Patients
- How lumbar movements affect muscle strength and laser protocols to recalibrate and reset
- Laser low back, hip, knee, and ankle protocols
- Gait reset protocols where the doctors will get into groups to assess gait patterns, test muscle strength in different phases of gait, and how to utilize the laser to improve gait. Drs will also learn how to assess the outcomes on the gait patterns that the laser had.
- Balance protocols with standard Rhomberg testing with eyes open vs closed. What specific findings can indicated is happening in the patient, and how to treat them with the laser and lifestyle factors.
- Pre and Post Op protocols including passive point and shoot techniques with the laser and protocols doing active muscle rehabilitation and scar tissue reduction techniques.
- Percussor techniques and Adjustor tool techniques for these conditions

Part 4

Sports Performance Enhancement for youth year-round travel team athletes, elite athletes, local sports teams, and weekend warriors, along with highly effective and simple scripts for explaining what lasers do to your patients (Dr. Kirk Gair)

- Scripts that clearly explain how the laser works, and that give the patient realistic expectations based off research
- Why sports injuries are skyrocketing with today's youth, how much it is costing per year, and how you can help reduce the costs and get the athletes back to competitive performance quicker
- How lasers can actually enhance sports performance to a level that one study from the Journal of Biophotonics said was "similar to a performance enhancing drug."
- How lasers can be part of the solution for the Opioid Epidemic, citing current studies showing lasers effectiveness compared to pain relievers and anti inflammatories
- How using lasers on the brain can enhance sports vision, sports performance, speed, and agility.
- How to use lasers for injury prevention
- How to implement lasers to enhance surgical recovery between 30-70%. Case studies will be used as examples.
- How to find imbalances in running and gait and quickly reset them.

Part 5

Traumatic Brain Injuries, Neurodegeneration, and Long Covid (Other, Research) (Dr. Kirk Gair)

- Review of current research studies showing the cellular effects to provide support for TBI and neurodegenerative conditions.
- How long Covid is affecting patient's brain function, body pain, and quality of life
- Research showing how the spike protein triggers auto immunity in some patients, and how you can provide support with laser protocols, nutritional, and supplemental protocols to improve quality of life and function.
- Evaluation techniques and questionnaires
- Nutritional red flags for patients at risk of concussions from sports or for patients recovering from concussions
- How to recognize early signs of CTE and neurodegeneration and what to do for it.
- Research on low level laser support protocols for children with autism, dyslexia, ADHD.
- Review of case studies from Dr Gair's patients ranging from mild TBI to severe and the treatment protocols
- Review of nutritional support protocols for brain injuries, and dysfunction like autism, Parkinson's, Alzheimer's, etc.
- Vagus nerve activation protocols with low tech and high tech options

Part 6 Functional neuro-orthopaedic rehabilitation principles (Dr. Brett Jarosz)

- FNOR overview
- FNOR matrix
- Nociception/noxious stimuli-neurogenic inflammation
- Fundamentals of neural plasticity in rehab

Part 7 Concussion (Dr. Brett Jarosz)

- Concussion overview
- Neurometabolic cascade
- Pathophysiology
- Symptoms, phenotype & persisting symptoms
- SCAT6 & SCOAT6