

100% ONLINE

THERAPEUTIC PAIN SPECIALIST CERTIFICATION

PLAN OF STUDY

Therapeutic Neuroscience Education

This class discusses the evolution of therapeutic neuroscience education, the importance of neuroscience education in patient care and, more importantly, the clinical application and implementation of therapeutic neuroscience education for patients with acute, sub-acute and chronic pain. Current best evidence shows that neuroscience educational strategies utilizing neurobiology and neurophysiology can reduce pain, increase function, improve movement, reduce fear and worst-case-scenario thinking, and actually change brain activity during pain experiences.

Neurodynamics I

While the majority of physical therapists, physicians, nurses, and other healthcare providers may not offer mental health or behavioral health services, it is important that all providers understand techniques for the care of patients seeking counseling or other services for behavioral health conditions. In this self-study course, learners get a glimpse of common models and strategies used to promote behavior change. The class explores the evolution of cognitive behavioral therapy, dialectical behavior therapy, acceptance and commitment therapy, trauma based-therapies, motivational interviewing, and the therapeutic use of self to enhance interaction between practitioner and patient. Other topics include therapeutic boundaries, scope of practice limits, and making referrals to behavioral health professionals.

Too Hot to Handle

Neuroscience research makes it increasingly clear that in some patients physical touch and movement,



essential for recovery, can actually pose a threat. This includes conditions such as complex regional pain syndrome, phantom limb pain, spinal cord injuries, and more. With persistent input to the central nervous system and brain, various long-lasting changes occur from pain, leading to clinical issues. The same neuroplastic (brain-changing) events associated with pathological pain, however, offer avenues to treat patients who are too sensitive for physical movement. The brain's perception of threat can be altered with therapeutic neuroscience education, but also via other senses, in essence remapping the brain to better manage pain. In addition to neuroscience education, treatments discussed, demonstrated, and practiced in this course include graded motor imagery, sensory discrimination, mirror therapy, and graphesthesia.

Neurodynamics II

Peripheral neuropathic pain in the hands, feet and other areas of the body outside the central nervous system may be one of the most challenging pain conditions seen in clinical practice and there has been an explosion in research associated with it. This course largely focuses on the latest thoughts associated with peripheral neuropathic pain. Modern pain science has viewed peripheral neuropathic pain treatment from a pharmacological perspective. But an understanding of the latest science warrants a movement- and cognitive-

THERAPEUTIC PAIN SPECIALIST CERTIFICATION

based approach, along with some medications, to help ease pain. The class will give clinicians a greater understanding of neuropathic pain so they're better able to categorize pain mechanisms to guide physical examinations and develop treatment strategies.

Everything Hurts

This course delves into pain and fatigue conditions such as fibromyalgia, chronic fatigue syndrome, chronic Lyme disease, non-celiac gluten sensitivity, irritable bowel syndrome, post-traumatic stress disorder, and more. It will help clinicians see how various complex pain issues share common features, including threat activation and biological and physiological defense mechanisms, as well as changes in neurotransmitters and immune system function. Showcased is the latest science associated with various widespread pain and fatigue conditions.

Neurodynamics Virtual Lab

This virtual lab is a video-instructed class in the clinical application of pain science that participants complete after taking the Therapeutic Neuroscience Education, Neurodynamics and Too Hot to Handle courses. In part one of the lab, students learn about safe and skillful handling of the nervous system, focusing on neurodynamics. In part two, they review and observe the clinical application of pain neuroscience education via video and a case study. Part three covers tests and treatments, with a focus on graded motor imagery for testing and treating a hypersensitive nervous system.

Focus on Function Virtual Lab

Current best-evidence shows that pain neuroscience education can reduce pain, increase function, improve movement, and reduce fear, worst-case-scenario thinking, and the cost of healthcare utilization. This online video and discussion group course bridges the gap from initial education in the science and methodology to independent application of this knowledge. Through lectures, Flipgrid assignments, and live group sessions, clinicians will develop skills aimed at true behavioral change leading to a functional, empowered patient.

Preoperative Neuroscience Education

Research shows that routine preoperative education classes, which are given to patients prior to surgery to reduce anxiety and stress, often fail to work. Partly, this is due to a heavy focus on procedural and anatomical

education, with little to no attention given to pain-specific education. A newly designed preoperative pain neuroscience education program has shown that teaching patients more about pain prior to surgery leads to positive outcomes. This three-week, self-paced class covers the development of a preoperative neuroscience education session and the content, delivery methods and clinical application of such a program for lumbar surgery and total knee reconstruction or replacement.

Business of Chronic Pain

More than 100 million Americans are affected by chronic pain, leading to increased use of the healthcare system, increased costs, and increased burden on care providers. These factors – and the general dissatisfaction of patients with current methods of treatment – create a business opportunity. Advanced therapeutic treatments for pain promise to become increasingly desirable due to their lower cost and effectiveness. This class focuses on the use and clinical implementation of pain science in a real-world clinical practice. Content includes evidence for pain science education and how to apply pain science to clinical practice, including topics such as staff training, building a multi-disciplinary clinic, cost effectiveness, billing, marketing, and more.

Clinical Decision-making for Patients with Pain

This three-week self-paced course equips clinicians to connect pain science principles to evaluating and establishing a plan of care for those struggling with pain. Topics include patient screening, determining SINS (sensitivity, irritability, nature, and stage), identifying dominant pain mechanisms and connecting treatment to those mechanisms. Students gain skill and confidence in setting treatment goals and prioritizing treatment interventions. They also receive information on advancing their pain science toolkit beyond the Therapeutic Pain Specialist program.

Therapeutic Pain Specialist Capstone Exam

The capstone requires students to combine, apply, and share the material from their previous coursework. Pain neuroscience education is relatively new and participants are encouraged to spread the message about research findings and clinical applications. There are two options for completing the capstone assignment.