

# Outline

## Improve Your Clinical Reasoning

Central nervous system: the driver of ALL function  
Neuroanatomy  
Brain development  
Chronic pain: the nervous system remembers  
Feedback loops - pain is circular

## Upgrade Your Clinical Assessment

Neurological screens for injuries  
Identifying neurological challenges  
Primitive reflex patterns and the power of vision  
Sensory motor development  
Vision and hearing related deficits  
Sensation changes and reintegration

## Integrate Neuroplasticity into Your Therapy Program

Practice Makes NEW Pathways  
Polyvagal theory: Fight, Flight and Freeze  
Trauma memory related to therapy sessions  
Crucial component: sensory stimulation  
Smooth movement tremors and distraction  
Changing low and high tone qualities  
Challenge equates to change  
Bracing: to be or not to be

## Design Effective Treatment Plans: Treat the Symptom, the Cause and Neurological Changes

Where to rewire the brain  
Use it or lose it  
Recruitment and retraining  
Use the lobes next door  
Before/after videos of sensory stimulation  
Beware of learned non-use

### Live Webcast Schedule

(Times listed in Central)

**8:00** Program begins

**11:50-1:00** Lunch Break

**4:00** Program ends

There will be two 15-min breaks (mid-morning & mid-afternoon).  
Actual lunch and break start times are at the discretion of the speaker.  
A more detailed schedule is available upon request.

## Target Audience

Physical Therapists • Physical Therapist Assistants • Occupational Therapists  
Occupational Therapy Assistants  
Speech-Language Pathologists

## Expand Your Reach: Incorporate Vision

The link between vision and balance and sensation  
Implications for neurological disorders:  
Stroke, TBI, concussion  
3D vision impairments – depth perception and safety  
Practical strategies for vision on the move!

## Taking it Home: Patients and Caregivers

PT phone home – game changing HEP strategies to increase compliance  
Repetition and novelty are key  
Simple and effective activities to send home  
Explaining complex concepts to patients

## Case Studies:

MVA with TBI  
Fall with knee injury and acute pain  
Low back pain – disc herniation with acute unrelenting pain  
Neurological signs post fall  
TKA acute pain and edema with resolution of pain and edema 2 treatments  
Anoxic injury – signs, symptoms and solutions

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## Objectives

1. Assess the multilayer approach using neuroanatomy and brain function related to injuries
2. Analyze the relationship between orthopedic trauma and brain dysfunction
3. Differentiate approaches to changing low and high tone qualities
4. Evaluate central nervous system dysfunction, and why practice makes pathways, and how to increase compliance in home programs
5. Evaluate tremors, eye alignment and nystagmus
6. Appraise and appreciate the importance of positive treatment sessions and verbal cues
7. Evaluate strategies to incorporate techniques into home programs for patients and caregivers



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# Neuroplasticity for Orthopedic Recovery and Pain Relief

How Injury Changes the Brain and How You Can Help Rewire it

Featuring Karen Pryor, PhD, PT, DPT, CH

## LIVE WEBCAST

Monday, July 20, 2020

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# Neuroplasticity for Orthopedic Recovery and Pain Relief

How Injury Changes the Brain and How You Can Help Rewire it

Featuring Karen Pryor, PhD, PT, DPT, CH

Evaluation and Neuroplasticity Treatment Strategies for Everything from TBI to Post-op

- Faster, more complete recovery
- Activate new pathways that detour around the damage
- Change tone to reclaim movement
- Look beyond symptoms – the power is in the central nervous system

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A NON-PROFIT ORGANIZATION CONNECTING KNOWLEDGE WITH NEED SINCE 1979

Neuroplasticity for Orthopedic Recovery and Pain Relief

Neuroplasticity is one of the most important concepts when it comes to recovery, but is often overlooked when treating traumatic injuries. From traumatic injuries and post-op conditions to stroke, this course will deliver new thoughts on how to detour around damage and incorporate viable nervous system connections for faster, more complete recovery.

It’s never too late. The brain is not hard wired. It can change and adapt, even decades after the initial injury.

Drawing on over 40 years of clinical experience, Dr. Pryor will teach you practical, evidence-based techniques and interventions to stimulate the brain and enhance recovery.

- Evaluate the nervous system for damage and functional pathways
- Address tone abnormalities, vision and how they are intimately related and treatable
- Advance patient function with guided neurological reconnection
- Improve balance and visuospatial function to enhance client independence and feelings of safety
- Create actionable treatment plans to help at home
- Reclaim movement and quality of life

You will learn practical and useful techniques that can be implemented immediately within your practice. These evidence-based interventions will apply across the spectrum from initial injury to recovery. Sign up today! You can’t afford to miss out on this chance to get the skills, techniques and knowledge you can use to promote neuroplasticity and increased function for your patients!

Speaker Bio

KAREN PRYOR, PHD, PT, DPT, CH, has practiced for 40 years in the field. Dr. Pryor is the owner of Health Sphere Wellness Center, an integrative therapy clinic in Nashville and Jasper, Tennessee. Involved with orthopedic, chronic pain patients she developed neuroplasticity techniques that are used in a wide variety of settings, including orthopedic hospitals, out-patient clinic, home health, assisted living centers and nursing homes, to advance neurological – orthopedic programs. She is an author of a book teaching Neuroplasticity techniques. Dr. Pryor serves on several boards, including the Tennessee State University Physical Therapy School and Knowles Home Assisted Living facility in Nashville, TN. In 2010, she received the President’s Volunteer Service Award for her contributions to advanced treatment by President Barack Obama. In addition to her pioneering neuroplasticity work, Dr. Pryor has served as an adjunct professor at Tennessee State University Occupational Therapy School, and Volunteer State Community College Physical Therapy Assistant program. She is a clinical instructor for several universities and colleges. With her years of experience and passion for complete wellness, Dr. Pryor advances a more expansive view of how to integrate therapy throughout the lifespan by using neuroplasticity techniques.

Speaker Disclosures:

Financial: Karen Pryor is owner of Health Sphere Wellness Center. She receives a speaking honorarium from PESI, Inc. Non-financial: Karen Pryor serves on the Leadership Interagency Council for Early Intervention board.

“One of the best seminars I have ever attended! It has inspired me to think outside the box to enhance my treatment sessions.” ~ Debbie, PTA

“I’ve been an OT for 37 years and the knowledge I gained at this seminar I can incorporate into my practice immediately.” ~Lisa OT




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This course is offered for .6 ASHA CEUs (Intermediate level, Basic Communication Processes area).

\*\* Please note that Speech-Language Pathologists must complete the post-test and evaluation within two weeks of attending the live event if they would like their participation submitted to the ASHA CE Registry. Detailed instructions will be provided the day of the program under the Handouts section of the online program.

\*Content and materials in this course may include interventions and modalities that are beyond the authorized practice of your profession. As a licensed professional, you are responsible for reviewing the scope of practice, including activities that are defined in law as beyond the boundaries of practice in accordance with and in compliance with your profession's standards.

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