# Modern Pain Science for the Physical Therapist

**Know pain. Know gain.**

**Dates:** May 21 & 22, 2016  
**Location:** Cook-Devs Center for Health Sciences, Grand Valley State University, Grand Rapids, MI  
**Cost:** $300 GVSU-PT alumni and DPT Program Cls; $350 all others  
**Contact hours:** 16 hours

The last 15-20 years have seen an explosion in our understanding of pain. Modern Pain Science for the Physical Therapist is a course focused on educating therapists on modern understandings of pain and how to apply it to clinical practice on Monday. An understanding of persistent pain states will be developed so the participant can better be able to educate, assess, and treat the patient suffering from persistent pain.

### Objectives:

1. Be able to apply current pain theory to education, assessment, and treatment of patients in pain  
2. Be able to describe both peripheral and central mechanisms that drive physical therapy interventions and use them to your advantage in clinic  
3. Learn how to utilize Therapeutic Neuroscience Education (TNE) in your current practice  
4. Gain a basic understanding of persistent pain in respect to chronic low back pain, osteoarthritis, fibromyalgia, complex regional pain syndrome, whiplash associated disorder (WAD)  
5. Be able to describe pain mechanism classifications and how to assess for them in your current patient population  
6. Be able to apply psychologically-informed physical therapy in your practice  
7. Gain exposure to cutting edge motor and sensory retraining programs for patients in pain including graded motor imagery

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<tr>
<th><strong>DAY ONE</strong></th>
<th><strong>DAY TWO</strong></th>
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| 8:00- Introductions/Objectives  
8:20- Pain History and Theory  
9:20- Modern Pain Theory  
9:30: Pain from the Peripheral Perspective  
9:40: Pain from the Spinal Cord Perspective  
10:00: Pain from The Brain’s Perspective  
10:15: Systemic Responses – Psychoneuroendocrinology  
10:30 Break  
10:45 Pain Classification  
11:00 Neurodynamics Lecture  
11:30 Neurodynamics Lab  
12:00 LUNCH  
1:00 Traditional Models of Education  
1:15 Mechanisms of a Bottom Up Approach  
1:45 Mechanisms of Top Down Effects  
2:30 Introduction to Therapeutic Neuroscience Education (TNE)  
2:45 Who, What, Where, When  
3:00 TNE Content Overview  
3:45 Application (Teaching in analogies)  
4:15 TNE Practice  
4:45 Case Study Example  |  
8:00 Recap / Questions  
8:30 Sensory dysfunction in persistent pain  
9:00 QST / Sensory retraining lecture  
9:30 QST / Sensory retraining lab  
10:00 Break  
10:15 Improving our communication  
10:45 Learning and behavior change  
11:15 Psychologically-Informed Physical Therapy  
12:00 LUNCH  
1:00 Common Conditions from a Pain Science perspective  
1:30 Motor Dysfunction in Persistent Pain  
2:00 Graded Motor Imagery Lecture  
2:30 Graded Motor Imagery lab  
3:00 Break  
3:15 Aerobic Exercise and Adjunctive Treatment  
3:30 Manual Therapy from a Pain Science Perspective  
4:00 Manual Therapy Lab  
4:30 Setting Goals and Expectations |
Mark Kargela, PT, DPT, OCS, FAAOMPT Dr. Kargela is a graduate of Grand Valley State University in 2003 where he received his masters degree. He later received his transitional DPT along with a manual therapy certification (MTC) from the University of St. Augustine. Mark is credentialed in Mechanical Diagnosis and Therapy (cert-MDT) and is board certified in orthopedic physical therapy. Mark has also been involved in the Michigan Physical Therapy Association in delegate and district treasurer roles along with serving as adjunct faculty at Grand Valley State University. He is a graduate of EIM’s fellowship program in 2012. He is online faculty for the pain science and clinical reasoning curriculum of EIM’s fellowship and teaches weekend intensive courses.

Dr. Kargela currently is the owner of Arizona Physical Therapy Specialists in Phoenix, Arizona where he is building a practice focusing on treatment of persistent pain conditions.

For additional information and to registration:  [www.gvsu.edu/ptpd](http://www.gvsu.edu/ptpd)