International Spine & Pain Institute

Therapeutic Pain Specialist Certification
The Therapeutic Pain Specialist (TPS) faculty

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Who are we?

ISPI and EIM are both post professional education companies with a combined 35 year experience, dedicated to creating and promoting an evidence-based, best practice culture within the healthcare system.

How do we do it?
• Outstanding curricula
• Delivered by an all-star cast of faculty
• Creative formats and platforms
• Various combinations

All of this leading to the best tailored individual learning experience.
The History of ISPI

ISPI started in 1998 as an educational company focusing on spinal manual therapy for physical therapists. The mission of The International Spine & Pain Institute is to create and implement the best courses possible for physical therapists using high-quality, state-of-the-art, research-based materials related to spinal disorders, orthopedics and pain science. Since the inception of ISPI, however, there has been a gradual shift towards pain science. Over time, with increased exposure of its faculty to pain science, ISPI shifted its focus and mission.

The mission shift of ISPI, along with the launch of the TPS in partnership with EIM, could not come at a better time:

- In the United States, 25.3 million adults suffer from daily chronic pain and, of those, 10.5 million individuals’ state that they have a lot of pain every day.1,2
- It is estimated that 126.1 million adults in the United States experience some pain over a 3-month reporting period, which means that more adults in the United States experience pain than those who do not.1,2
- Within these staggering prevalence numbers is the associated cost of persistent pain in the United States, which adds an economic burden of $560 to $635 billion dollars annually.1,2
- The Centers for Disease Control (CDC) in the US have reported that prescription opioids for pain cause three times the number of annual deaths in the US than cocaine and heroin addiction combined.3
- According to the CDC, 78 Americans die every day of an opiate drug overdose.3
- 90% of the world’s use of opiate pain medicine occurs in the United States.4,5
- Since 1999, the rate of opiate overdose deaths has quadrupled.5

Adding to this burden is the fact that chronic pain takes its toll on healthcare providers as well. It is now well documented that healthcare providers experience frustration when treating persistent pain.6–10 A main reason clinicians struggle with treating chronic pain is the fact that they are not trained well enough.11–13 Many of the models taught in school are outdated, antiquated and even blatantly wrong, yet still form the basis of “pain education.” This mismatch between what patients present with and what has been taught has been suggested as a key element in the clinical struggle to treat chronic pain.

Within this dichotomy, lies the evolution of the TPS and ISPI’s mission update of taking on pain in the United States, from a physical therapy perspective. Current best-evidence strongly supports the combination of education and exercise as key elements in treating chronic pain. Both of these elements are foundational in physical therapy. In fact, the late Patrick Wall, MD, PhD, one of the world’s iconic pain specialists proposed physical therapy to be the ideal profession to treat pain by blending all the key non-pharmacological elements.12,14
• Hands-on treatment
• Time with patients
• Expertise in movement and exercise
• Low cost
• Empowering patients to help themselves
• Huge workforce
• Easy access
• Knowledge of biology

With these issues in mind, ISPI and EIM developed the TPS – the first comprehensive pain certification program in the US from a physical therapy perspective.

What makes us qualified?

The TPS is an outflow of more than a decade of research by the ISPI faculty. To date, ISPI faculty have published dozens of papers pertaining to pain science in various peer-reviewed journals, including various highly ranked journals, medical journals, etc. Additionally, ISPI faculty have won several awards pertaining to this research, as well as presented at numerous national and international conferences. Specific to TPS, the faculty has published papers pertaining to:

• Therapeutic Neuroscience Education\textsuperscript{7,15-33}
• Neurodynamics\textsuperscript{34-39}
• Graded Motor Imagery\textsuperscript{40-42}

The TPS Layout

The TPS infographic provides a quick view of the program. The TPS Certification is comprehensive; filled with various elements needed to treat chronic pain and aimed to be a clinical program. The TPS consists of a blend of online self-paced classes, readings, group discussions, faculty involvement with groups, weekend intensive lab sessions and examinations.

In the US, over 100 million people suffer from chronic pain resulting in an increase in prescription medication use, surgery, injections, medical tests and imaging.

Current best-evidence shows that Therapeutic Neuroscience Education improves pain ratings, function, physical movement and cost of healthcare utilization.

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<tbody>
<tr>
<td>Pain Neuroscience Education</td>
<td>Neurodynamics</td>
<td>Too Hot To Handle</td>
<td>DAY 1: Lab for Neurodynamics</td>
<td>DAY 2: Lab for Too Hot To Handle and TNE</td>
<td>Neurodynamics</td>
<td>DAY 1: Focus on Function-TNE</td>
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<tr>
<td>6 weeks online</td>
<td>3 weeks online</td>
<td>2 day intensive</td>
<td>3 weeks online</td>
<td>2 day intensive</td>
<td>3 weeks online</td>
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Physical Therapists
Occupational Therapists
Medical Doctors
Nurse Practitioners
Physician Assistants
PT Assistants
OT Assistants
Doctors of Osteopathy
Nurses
Psychologists and more...
The Goals of the TPS

• Become a certified, highly skilled practitioner with advanced clinical competency
• Become a highly skilled, proficient and confident clinician in the challenging field of treating persistent pain
• Enhance critical thinking and psychomotor skills to improve decision-making and outcomes of care
• Have the opportunity to use the TPS Certification credit hours toward tDPT and fellowship

Curriculum

The TPS consists of 13 credit hours of blended online and onsite learning. The curriculum is designed to be completed in 6 to 12 months, however the student has up to 2 years (24 months) of active enrollment to complete the program. The curriculum consists of the following outlined academic courses:

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<thead>
<tr>
<th>Course</th>
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<tr>
<td>ISPI 6410</td>
<td>Therapeutic Neuroscience Education</td>
<td>4 credits</td>
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<tr>
<td>ISPI 6151a/b</td>
<td>A Study of Neurodynamics I &amp; II</td>
<td>2 credits</td>
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<td>ISPI 6152</td>
<td>Too Hot to Handle</td>
<td>1 credit</td>
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<tr>
<td>ISPI 6100WI</td>
<td>Weekend Intensive: Neurodynamics and Sensitization</td>
<td>1 credit</td>
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<td>ISPI 6154</td>
<td>Everything Hurts</td>
<td>1 credit</td>
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<td>ISPI 6101WI</td>
<td>Weekend Intensive: Focus on Function</td>
<td>1 credit</td>
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<tr>
<td>ISPI 6155</td>
<td>Perioperative Neuroscience Education</td>
<td>1 credit</td>
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<tr>
<td>ISPI 6156</td>
<td>Business of Chronic Pain</td>
<td>1 credit</td>
</tr>
<tr>
<td>ISPI 7180</td>
<td>Capstone Project &amp; Final Examination</td>
<td>1 credit</td>
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13 credits
The first course in the TPS is Therapeutic Neuroscience Education (TNE). It is a 6 week online, faculty directed course. Students view recordings of the educational material, view the accompanying handouts, read required readings and engage in group discussions on various TNE topics. Group discussions are with other TPS students and the group’s assigned faculty member.

Teaching people about pain can have a therapeutic effect. This course is designed to update attendees on the latest evidence and clinical application of therapeutic neuroscience education for patients in pain. Current best evidence has shown that neuroscience educational strategies utilizing neurobiology and neurophysiology are able to reduce pain, increase function, reduce fear and catastrophization, and improve movement and change cognitions and brain activation during pain experiences. Therapeutic neuroscience education changes patient beliefs regarding their pain, thus reducing the threat of pain. This course will discuss the evolution of therapeutic neuroscience education, why neuroscience education is needed in patient care and, more importantly, the clinical application and implementation of therapeutic neuroscience education for patients with acute, sub-acute and chronic pain. Special features include various metaphors, images, examples and case studies explaining neuroscience to patients in pain. In addition the class will cover clinical issues such as compliance, pacing exercise and activity, incorporation of therapeutic neuroscience education with traditional movement based therapy, billing and insurance reimbursement concerns and delivering therapeutic neuroscience education in busy, time-constrained clinical environments. This class is a must for all professionals dealing with patients in pain.

Upon completion of the online TNE class, students will complete an online quiz related to the TNE material. The quiz fulfills continuing education unit (CEU) requirements, and tests their knowledge of the material associated with the class to ensure they are ready to move onto the next phase of the TPS. The quizzes after each module varies between 15-25 questions in true/false and short answer formats.

Course Objectives:
At the end of the course the student will be able to or will have completed:
1. Discuss the latest evidence for therapeutic neuroscience education
2. Demonstrate the clinical ability to apply therapeutic neuroscience education to clinical practice with the use of at least one metaphor shared in class
3. List at least half of the output systems discussed in class and their response in a chronic pain patient
4. List potential strategies to implement therapeutic neuroscience into clinic practice regarding time, staff, billing and traditional therapeutic treatments
5. Design a treatment plan for a chronic pain patient based on output system dysfunctions with correct pain neurophysiological reasoning behind the treatment with information provided in the course
Upon completion of the 6-week online TNE, students embark on the didactic portion of the neurodynamics class. The didactic portions are divided into material before the weekend intensive and material after the weekend intensive. The neurodynamics online material is a blend of self-paced videos, accompanying handouts and required readings.

This two part course is designed to update participants on the latest evidence and clinical application of neurodynamics. Neurodynamics is the physical ability of the nervous system allowing it to move, slide, glide and accommodate human movement and function. Compared to more traditional manual therapy models focusing on joints and muscles, neurodynamics is new and vitally important in restoring normal movement and function. To understand the physical movement of nerves, neuroscience knowledge is explored to understand how pain works from a neurobiological and neurophysiological perspective. This course will discuss the latest research in the use of neurodynamic tests for examination as well as treatment. Mounting evidence supports the use of neurodynamics in various traditional orthopedic based disorders such as low back pain, radiculopathy, plantar fasciitis, lateral epicondylitis, whiplash associated disorders, neck pain, carpal tunnel, post-surgery, ankle sprains and more. The didactic coursework will prepare attendees for the weekend intensive lab sessions. Following the lab session on the weekend intensives, the course will conclude with the clinical application of the neurodynamic tests and treatments associated with the course. This course adds the important handling skills component for healthcare providers treating patients with pain.

Upon completion of the online neurodynamics classes (pre- and post-weekend intensive), students will complete an online quiz related to the neurodynamics material. The quiz fulfills CEU requirements, and tests their knowledge of the material associated with the class to ensure they are ready to move onto the next phase of the TPS. The quizzes after each module varies between 15-25 questions in true/false and short answer formats.

Course Objectives:
At the end of the course the student will be able to or will have completed.
1. Review current evidence and understanding of neuroanatomy and neurogenic pain related to evaluation and treatment of neurodynamics through attending lecture and reviewing course manual
2. Develop a clinical working knowledge of neurodynamics
3. Develop an understanding of the importance of physical testing and handling of people in pain
4. Be updated on the latest evidence, both biological and clinical trials, of neurodynamic tests and treatments in a variety of pain-related conditions
5. Differentiate neurodynamic treatment principles for various clinical examples based on lecture material and course manual in class discussion
6. Merge neurodynamic information and concepts into other paradigms of examination and treatments of musculoskeletal conditions
7. Develop a base knowledge of neurobiology to allow for practical tests, examination and treatments in weekend intensive lab sessions
The third, and final, online class prior to the weekend intensive is Too Hot to Handle. This class, along with neurodynamics and TNE provide the necessary didactic preparation for the weekend lab class. The Too Hot to Handle class combines self-paced videos, accompanying handouts and required readings.

Many patients seeking help for pain are simply “too hot to handle.” Modern pain science refers to this as allodynia and/or hyperalgesia. Nowhere is this more evident than Complex Regional Pain Syndrome (CRPS). Using CRPS as a template, this course will feature various aspects of CRPS including differences between CRPS 1 and CRPS 2, clinical presentation and diagnosis, current epidemiological factors and risks associated with the development of CRPS to discuss hypersensitization of the nervous system. In the last 10 years, knowledge of hypersensitization, including CRPS, has increased rapidly leading to new advances in physical treatment. Now patients with hypersensitization can not only be managed, but treated effectively and returned to normal function. In addition the three main pathobiological processes currently thought to be the main issues with CRPS, and general hypersensitization, will be discussed. These are aberrant inflammatory mechanisms, vasomotor issues and neuroplastic changes in response to pain. This class will feature an extensive review of treatments based on the latest evidence for treating patients with CRPS and hypersensitization. Included are graded motor imagery, sensory discrimination, graphesthesia and neuroscience education. Various examination and treatment techniques will be discussed allowing preparation for the weekend intensive lab sessions. This course is a must for healthcare providers working in a variety of clinical settings dealing with CRPS or any patients displaying a heightened sensitization to physical movement and handling.

Upon completion of the online Too Hot to Handle class, students will complete an online quiz related to the Too Hot to Handle material. The quiz fulfills CEU requirements, and tests their knowledge of the material associated with the class to ensure they are ready to move onto the next phase of the TPS. The quizzes after each module varies between 15-25 questions in true/false and short answer formats.

Course Objectives:
At the end of the course the student will be able to or will have completed.

1. Be able to understand the pathobiology of the development of hypersensitization in chronic pain
2. Be able to recognize the current criteria for the diagnoses of CRPS
3. Be able to identify bio-psycho-social factors associated with the development of hypersensitization
4. Be updated on the latest evidence based approaches for managing patients with hypersensitization
5. Be able to apply the information from the educational session into clinical practice
6. Increase sensory discrimination and proprioception to restore sensory and motor mapping
7. Develop a base knowledge of hypersensitization to allow for practical tests, examination and treatments in weekend intensive lab sessions
This weekend intensive serves as the practical application of the TNE, neurodynamics and too hot to handle courses. The online didactic classes prepare students for the weekend lab-intensive work.

On day 1, attendees will practice and develop skills in the physical examination of a sensitized nervous system. Practical sessions focus on the main upper extremity nerves (median, radial and ulnar), trunk, head and lower extremities, including both lumbar and lumbosacral tracks. Practical sessions include identifying and palpating peripheral nerves, active and passive neurodynamic tests as well as treatments for the sensitive nervous system. Day 2 focuses on desensitization of the nervous system. First, attendees will practice and learn easy-to-follow strategies to teach people about pain, including why they are so sensitive. This practical application of therapeutic neuroscience education will prepare patients for treatments aimed at desensitization of a hypersensitive nervous system. Prior to desensitization, attendees will practically test various aspects associated with sensitization, including laterality, two point discrimination, body diagram drawings, localization of stimulus and graphesthesia. Treatments will include retraining left-right discrimination, motor imagery/visualization, localization, sensory discrimination, graphesthesia and mirror therapy.

Course Objectives:
At the end of the course the student will be able to or will have completed.
1. Locate and palpate peripheral nerves in upper limb and lower extremity on lab partners using course manual and with instructor assistance
2. Demonstrate upper limb, trunk, lumbar and lumbosacral neurodynamic tests performed on lab partners after demonstration from instructor(s) and with use of manual
3. Demonstrate upper limb, trunk, lumbar and lumbosacral neurodynamic treatments performed on lab partners after demonstration from instructor(s) and with use of manual
4. Choose appropriate neurodynamic test and treatment for clinical application to at least 1 of 8 written case studies presenting to class for discussion using course teachings and course manual.
5. Practice and demonstrate an ability to explain nerve sensitization to patients in pain
6. Skillfully perform sensorimotor testing of hypersensitization on lab partners using course manual and with instructor assistance
7. Practice and perform all the treatments associated with graded motor imagery on lab partners using course manual and instructor assistance
ISPI 6154 Everything Hurts (1 credit)

Following the weekend intensive and the post-weekend intensive online didactic material for the neurodynamics course, students embark on the Everything Hurts course. The Everything Hurts class combines self-paced videos, accompanying handouts and required readings.

Many chronic pain sufferers are diagnosed with widespread, diffuse, and non-specific pain in conditions like fibromyalgia, chronic fatigue syndrome, metabolic disorder and Lyme disease. Current neuroscience is pointing to a shared mechanism of brain processing (pain neuromatrix) and significant alterations in biological systems such as the immune and endocrine systems in these patient populations. Collectively, these conditions affect approximately 5% of the population - or more than 15 million Americans. Research has shown that treatments such as cardiovascular exercise, strengthening exercise, membrane stabilizing drugs and education (especially cognitive behavioral therapy) are helpful in treating widespread pain. But how does it work? How can therapy help patients with widespread pain? This class will discuss the epidemiology and etiology of conditions like fibromyalgia as well as the current medical model for treating widespread pain and especially the deficiencies in this model. The class will focus on the new neuroscience view of widespread pain, including the brain’s processing of pain, nerve sensitization, neuroendocrine and immune changes in response to pain, changes in motor function, sleep and more. Evidence-based treatments such as therapeutic neuroscience education, aerobic exercise, pacing, graded exposure, goal setting and various other strategies such as relaxation, breathing and sleep hygiene will be discussed in patients with widespread pain.

Upon completion of the online Everything Hurts class, students will complete an online quiz related to the Everything Hurts material. The quiz fulfills CEU requirements, and tests their knowledge of the material associated with the class to ensure they are ready to move onto the next phase of the TPS. The quizzes after each module varies between 15-25 questions in true/false and short answer formats.

Course Objectives:
At the end of the course the student will be able to or will have completed.

1. Be updated on the latest evidence for treating widespread pain
2. Develop a greater understanding of the neuroscience, neuroendocrine and immune changes associated with widespread pain
3. Be able to explain widespread pain to patients utilizing therapeutic neuroscience education
4. Develop a comprehensive movement, pacing and graded exposure treatment plan for patients with widespread pain
5. Be able to apply all strategies and knowledge to clinical practice
The second and final weekend intensive class is the behavior class associated with TNE. The didactic material covered in all the online classes prior to weekend intensive 2 (TNE, neurodynamics, Too Hot to Handle and Everything Hurts) prepares students for the weekend class. The weekend intensive combines small and large group discussions, breakout sessions, lectures and problems-solving skills related to behavioral change in people suffering from chronic pain.

In recent years, pain neuroscience from a therapeutic perspective, has gained considerable evidence, especially teaching people more about their pain. Current best-evidence shows that therapeutic neuroscience education improves pain ratings, function, pain catastrophization, physical movement and cost of healthcare utilization. Clinically there is a shift whereby more and more clinicians are gaining experience in teaching people more about pain. This, however, is a good starting point, but not the end-point. The ultimate expression of recovery is behavior change, or return to physical confidence. Following the initial pain education, clinicians now need to embrace and impart additional strategies such as goal setting, pacing, graded exposure and behavioral change leading to a functional, empowered patient being able to resume a fulfilled meaningful life. This course bridges the gap from initial pain education to independence. Through lectures, case studies, group sessions, clinical application and motivational interviewing, clinicians will develop skills aimed at true behavioral change.

Course Objectives:
At the end of the course the student will be able to or will have completed.

1. Advance their knowledge and clinical ability to perform therapeutic neuroscience education
2. Problem solve various barriers to reconceptualization regarding therapeutic neuroscience education
3. Utilize motivational interviewing and goal setting to develop a structured plan of care to foster behavioral change
4. Develop and implement pacing and graded exposure of various daily activities and exercise to people with persistent pain
5. Identify, discuss and address issues related to fear-avoidance and kinesiophobia for people recovering from pain-related fear and limited function
6. Develop strategies to apply course material into clinical practice
Following the second weekend intensive, students return to the online environment for 2 online, self-paced classes prior to their final capstone project. The first class is the perioperative TNE class. The perioperative TNE class combines self-paced videos, accompanying handouts and required readings.

This course class will examine lumbar surgery and knee replacements from a neuroscience perspective, including why so many patients suffer with pain after surgery, patient beliefs about surgery as well as how surgeons prepare patients for surgery. This class will feature an extensive neuroscience education section, which will help patients prior to surgery, immediately post-op and subsequently in the acute and sub-acute postoperative phase. Preoperative education has shown some effect in altering anxiety, stress and fear associated with surgery. This preoperative neuroscience education program created by physical therapists has recently been developed and has not only shown immediate post-education improvements in psychometric measures, beliefs and expectations for surgery and physical movements, but also a significant reduction of brain activity associated with painful tasks in patients scheduled for lumbar surgery. Additionally, preoperative neuroscience education has shown superior outcomes following surgery compared to patients receiving traditional surgeon led education in regard to back pain, leg pain, fear, catastrophization, function and postoperative healthcare utilization.

Spinal surgery and knee replacements in the US are increasing. Outcome data indicates nearly 40% of patients experience persistent pain and disability following lumbar surgery. Postoperative rehabilitation following lumbar surgery has shown little efficacy in decreasing postoperative pain and disability, and it has been shown that patients are typically not sent to physical therapy following lumbar surgery. For knee replacements, recent studies have highlighted the issues of central sensitization associated with knee arthritis and knee replacement, which has pain scientists now developing a similar pain-science approach to knee replacements. This class introduces participants to the development of the preoperative neuroscience education program, the content, delivery methods and clinical application of such a program for lumbar surgery, as well as the adaptation and utilization of a new knee replacement program. The educational model will then be discussed within the realms of a postoperative movement based approach to exercise and range of motion.

Upon completion of the online Perioperative Therapeutic Neuroscience Education class, students will complete an online quiz related to the Perioperative Therapeutic Neuroscience Education material. The quiz fulfills CEU requirements, and tests their knowledge of the material associated with the class to ensure they are ready to move onto the next phase of the TPS. The quizzes after each module varies between 15-25 questions in true/false and short answer formats.

Course Objectives:
At the end of the course the student will be able to or will have completed.

1. List two reasons why a new bio-psycho-social treatment approach is needed to address pain in lumbar surgery and knee replacements
2. Define the steps in the development and validation process of the preoperative neuroscience education program for lumbar surgery patients and now knee replacements
3. Articulate the use of the content and delivery methods for the preoperative neuroscience educational program for use with preoperative lumbar surgery patient during the clinical application time in class
4. Articulate the use of the content and delivery methods for the preoperative neuroscience educational program for use with preoperative knee replacement patient during the clinical application time in class
5. Restate the general findings of the research showing preoperative neuroscience educational treatment program produces superior results to the biomedical model utilized by US spine surgeons for patients undergoing lumbar surgery
6. Integrate the majority of the concepts from the therapeutic neuroscience educational session into clinical practice to fellow participants utilizing case scenarios
The final course in the TPS is the Business of Chronic Pain. The Business of Chronic Pain class combines self-paced videos, accompanying handouts and required readings.

This course combines two worlds – pain science and business. It is estimated that more than 110 million Americans are affected by some form of chronic pain. This number is ever increasing. This increase of chronic pain is associated with increased utilization of healthcare dollars and added burden on healthcare providers, including physical therapists. All of this is in lieu of healthcare reform. Emerging research into neurophysiology and neurobiology of pain clearly shows that movement and bio-psycho-social professions such as physical therapy are ideal to treat these patients. The increase in chronic pain and general dissatisfaction by patients with care provided creates a unique business opportunity for physical therapists. Additionally, advanced therapeutic treatments for pain, such as therapeutic neuroscience education, graded motor imagery, pacing, graded exposure, exercise and more will become increasingly desirable due to its low cost and it’s empowerment of the patient. This course will focus heavily on the use and clinical implementation of pain sciences in various therapeutic realms such as private practice, outpatient rehabilitation, inpatient acute care, large hospitals, etc. Course work includes marketing chronic pain to healthcare providers, third-party payers and patients, time-management, compliance, home-exercises, staff development, development of a pain program, billing documentation, outcome measures and more. The evidence for pain science is ever-increasing, but has to be “taken to the clinic.” This course is a must for everyone interested in helping people in pain clinically.

Upon completion of the online Business of Chronic Pain class, students will complete an online quiz related to the Business of Chronic Pain material. The quiz fulfills CEU requirements, and tests their knowledge of the material associated with the class to ensure they are ready to move onto the next phase of the TPS. The quizzes after each module varies between 15-25 questions in true/false and short answer formats.

Course Objectives:
At the end of the course the student will be able to or will have completed:
1. Understand the epidemiological issues associated with chronic pain, including increased patient dissatisfaction
2. Develop an understanding how the pain epidemic is impacting clinical practice, including economical issues and burnout
3. Be updated on the latest evidence and understanding of how a movement, bio-psycho-social and neuroscience approach is needed to take assist patients with persistent pain
4. Be updated on the contents of a best-evidence pain management program
5. Identify opportunities for the development, implementation and marketing of such a pain program to other healthcare providers and the public
6. Utilize material, strategies and concepts from the pain certification to develop pain programs in a variety of clinical settings and patient populations
7. Apply the information from the educational session into clinical practice

The capstone course is the final project for TPS Certificate Program students. Students will complete a comprehensive project to demonstrate competency in selected pain science applications. To date, capstone projects have centered around the development of a PowerPoint presentation, but a comprehensive case study is also acceptable. Guidelines and examination rubrics are provided to guide students. As the TPS progresses, additional examination capstones will be developed, ultimately providing students with a choice to select one of several potential capstone projects, best suited to their abilities, interest and learning needs.

Upon completion of the capstone, it is distributed to faculty for review, grading and feedback. The capstone grade is then entered toward the final grade.
Weekend Intensive Locations
Each cohort of students is required to attend 2 weekend intensives. Given the reach of the TPS, weekend intensive locations have been chosen to allow clinicians to attend weekend intensives in their region. Weekend Intensives are scheduled in several locations across the country to accommodate students in various regions.

TPS Academic Calendar
The TPS start 4 times per year, in line with EIM’s other programs:

- **second Monday in January**  application deadline December 1
- **second Monday in March**  application deadline February 1
- **second Monday in July**  application deadline June 1
- **second Monday in September**  application deadline August 1

From start to finish the TPS takes 5 months to complete.

Student Profile
We believe the TPS is ideally set for the modern day working professional. Full-time clinicians have little extra time and the blend of online, self-paced and condensed weekend classes are ideal to maximize the learning experience, yet decrease added time requirements. The TPS can be completed by students ranging from new graduates to more experienced, seasoned clinicians to program directors and supervisors. The TPS calendar is flexible and allows students to enroll and pace their education on various tracks – 6 months, 12 months or even 2 years. Additionally, the TPS caters to any/all clinicians interested in helping people with chronic pain. Although primarily designed for physical therapy, the TPS program has, since its inception, had students who are physicians, occupational therapists, physical therapy assistants, athletic trainers, etc.

Following the TPS
Upon completion of the TPS, in line with the mandate to take on pain in the US, ISPI and EIM offer a pain fellowship as well as a post-professional doctorate in physical therapy (tDPT) related to pain science.

The Online Platform
The TPS certification along with all EIM online material is powered by a program called Moodle. The system allows students to track their course work, view videos, be in online discussion groups for class, receive administrative messages associated with the TPS, as well as the tests and quizzes. Moodle is easy to use with minimal training needed. Faculty can assist students not familiar with the online platform.

Admission Requirements
As with any program, there are some minimal requirements for acceptance into the TPS:

- All healthcare providers must meet the minimum education/credentialing requirements for their respective career (to be evaluated during application process).
- If English is not the applicant’s native/first language, specified language proficiency requirements must be met.
- All healthcare providers must possess a current and valid license to practice in their respective profession. This license must not be under suspension, revocation, probationary status, or subject to disciplinary proceedings or inquiry. Non-licensed Rehab Technicians will be considered on a case-by-case basis.

Program pricing
The complete tuition for the TPS is $4800, not taking into consideration the various network partner discounts,
tuition credit for coursework already completed, etc. This price includes all coursework and learning materials. There is an application fee of $100 and $2,000 is due 30 days before the start of the first course. In comparison to “typical” weekend continuing education classes, the TPS pricing is just a combination of these traditional course prices. Prior to the new blended model of online and in-person training, the proposed ISPI TPS track would have consisted of 6 weekend classes, each requiring travel, accommodation and the course fees. The payment schedule can be individualized for each student with the ability to be altered in the event of an employer reimbursing payment for the TPS.

Initials
In line with the American Physical Therapy Association (APTA) recommendations, ISPI and EIM urge clinicians to designate themselves by their primary profession, followed by their terminal degree. Specializations should be used as sub-titled designations, i.e., Therapeutic Pain Specialist, Certified Strength and Conditioning Specialist, etc.

Conclusion
The staggering numbers have called for a national large scale approach which must be multidisciplinary. In order to address the US pain epidemic from a multidisciplinary national perspective, it would seem fundamental to ensure all healthcare providers have an updated knowledge of pain science. In recent years there have been significant advances in pain science, which is added into the TPS. By training a large workforce in a combination of pain science, education and movement, it fulfills the requirements set forth by Dr. Patrick Wall and we truly believe the TPS takes a huge step in the right direction in helping the pain epidemic.

To date, over 400 health care providers have been trained, with the goal to continually expand the map of high-quality, compassionate providers helping individuals suffering from persistent pain.

For more information
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References: