

Explain Pain On-Demand course 2023/2024

Who is this course for? All therapists and clinicians who are looking for a deep understanding and a modern, active, science-based approach to achieving better outcomes for their patients experiencing pain.

What's included?

- 13+ hours of content to work through, reflect on and integrate into your clinical work at your own pace and learning style.
- 12-month access
- A comprehensive digital workbook, the complete slide library and a carefully curated collection of dozens of readings.

Session details

Session 1: A broad overview

- The immense problem of pain and its cost on people and society.
- Approaches to big public health issues frameworks from neuroscience, psychology, educational science, pain biology, and even a little philosophy
- Complexity Science and why this can revolutionise your way of thinking about pain.
- Sensemaking and how our definition of pain can influence the clinical encounter.

Session 2: Nociception and inflammation

- The vital difference between nociception and pain
- A zoom-in on ion channels and action potentials.
- The likely pattern of pain associated with different sources of nociception.
- Inflammation, neurogenic inflammation, and peripheral sensitisation in detail, including implications for treatment.

Session 3: Neuropathic pain

- A great introduction for those new to neuropathic pain, and a guide to go deeper if you already work in this field.
- The pathophysiology and presentation of entrapment neuropathies.
- What the most up-to-date research tells us about treatment.

Session 4: Pain and the brain

- Beyond simple slogans and heuristics
- A deep dive into ideas, including a multimodal salience network, the distributed nociceptive system, and a complex top-down and bottom-up framework that encompasses and informs all pain treatment approaches.

Session 5: Processing changes

Following closely from Session 4 -

- An introduction to spinal cord and dorsal horn anatomy.
- The science for a modern take on central sensitisation and its clinical implications.
- A bigger picture view integrating processing problems with issues in the tissues to provide empowering clinical narratives.



Session 6: The endocrine system and pain

A new lecture for this course -

- Endocrine and stress biology with an emphasis on the difference between short-term and chronic stress effects, and the tight link between chronic stress and pain.
- The stress response, the Sympathomedullary Pathway, the Hypothalamic-Pituitary-Adrenal axis (HPA axis) and the effect of chronic stress on the cardiovascular system, metabolic system, inflammation, memory and sleep.
- Detailed consideration of stress, pain and chronic pain, with the biology powerfully suggesting immediately applicable clinical approaches to manage stress and pain.

Session 7: The neuroimmune interactions and pain

- Introduction to the 'newest' player in cutting-edge pain thinking.
- Developing the story from cytokines to neuroinflammation and chronic low-grade systemic inflammation.
- Putting it all together with a clinical focus.

Session 8: Moving well, eating well and sleeping well to help with pain

A new lecture for this course -

- Broad strategies for pain treatment and management that are available regardless of healthcare discipline.
- Supporting evidence.
- Discover the confidence to broaden your pain management thinking.
- Find the inspiration to keep learning and developing your knowledge and expertise.

Session 9: Language, metaphor and the Protectometer

- The language we use as therapists.
- Immediately applicable suggestions for simple but effective changes.
- Evidence for the power of metaphor to both help and hinder in healthcare.
- A clinical model to help you develop and use metaphor and language with skill and precision.
- A walk-through of Moseley and Butler's *Protectometer* Danger and Safety, DIMs and SIMs and using the *Protectometer* to set up treatment and track.

Session 10: Case vignettes and studies

- Opportunities for deeper reflection
- Previous sessions combine together through the Protectometer.

Learning objectives

By the end of this course, you will have:

- 1. Built a deep understanding of the complexity of the human experience of pain.
- 2. Developed a comprehensive knowledge base around three key biological systems: the nervous, endocrine and neuroimmune systems, and their common links with pain.
- 3. Constructed essential connections between the presented biology and evidencebased clinical approaches to treating and managing pain.
- 4. Gained vital insight into translating 'bench science to the bedside'.
- 5. Revolutionised your thinking and updated your language about the experience of pain and learned how to use the *Protectometer* as a central assessment, educational, planning and treatment tool.