

## Explain Pain & Graded Motor Imagery

### A 3-day interactive course

You can help overcome the most burdensome non-fatal health condition facing our species - pain.

Pain costs our community more than heart disease, cancer and diabetes combined, but it is largely a hidden problem with very little awareness or attention. While the dollar costs are measured in the hundreds of billions, the real cost – the human cost - is immeasurable.

The essence of Explain Pain is the notion that when people understand pain they hurt less, and there is now ample, reliable and repeated evidence supporting this. Teaching people about the biology of pain has become a well accepted strategy, but in order to do it well you need broad and deep knowledge, combined with the skills to tailor and deliver effective educational interventions.

NOI's Explain Pain and Graded Motor Imagery courses provide the very latest in pain science education and pain treatment.

### COURSE PROGRAM

#### DAYS ONE & TWO – Explain Pain | DAY THREE – Graded Motor Imagery

#### DAY ONE:

The pain biology foundation, including:

- the vital difference between nociception and pain
- identifying patterns suggestive of different sources of nociception
- recognising peripheral nerve and neuropathic contributions to pain states
- understanding the powerful neuroimmune and neuroendocrine outputs and their links to pain
- how pain biology and a biopsychosocial approach comes together in The Protectometer

#### DAY TWO:

'How To' of Explaining Pain with sessions and workshops on:

- understanding the evidence base for Explain Pain
- developing a curriculum tailored to a group or individual to ensure that your educational
- intervention is effective, measurable and repeatable
- how to carefully listen for and use metaphor and other language patterns to help you enter the patient's story, while making your education memorable

#### DAY THREE:

- the science underpinning the three stages of Graded Motor Imagery (GMI)
- how to confidently use Left/Right Discrimination, Imagined Movements and Mirror Box Therapy in the clinic
- the vital clinical reasoning necessary to apply GMI to any complex pain state

### PRE-REQUISITE

Purchase and download the [Recognise App](#) required for GMI prior to the course date. Available at [www.noigroup.com/en/Product/BTRAPP](http://www.noigroup.com/en/Product/BTRAPP)



### Your instructor Prakash Sharoff

Prakash is the director of PHYSIOHEALTH Pain Management & Performance Enhancement and also the lead instructor for its Research & Teaching Institute where he teaches various courses. He has worked with national and international level teams both in India and Australia and is also a consulting physiotherapist for Olympic Gold Quest. He provides treatment and consultation to some of India's finest athletes. In 2001 Prakash received his Bachelor of Physiotherapy from Seth GS Medical College, KEM Hospital, Mumbai, and then went straight into private practice. 2005 saw a move to the University of South Australia where he completed his Masters in Orthopaedics, Sports and Manual Therapy. Prakash was awarded the Marie Hammond Prize (2007) for highest achievement in the master's program by the Australian Physiotherapy Association and the University of South Australia.

### Enhance Course Outcomes

Pre-reading of the following is strongly recommended for better learning outcomes:

For Explain Pain

- [Explain Pain Second Edition book](#)
- Moseley GL et al 2004 A RCT of intensive neurophysiology education in chronic low back pain. *Clinical Journal of Pain* 20:324-330

For GMI

- [The Graded Motor Imagery Handbook](#)
- Study of the information and resources provided at [gradedmotorimagery.com](http://gradedmotorimagery.com).

## Understanding the Protectometer for Chronic Pain Assessment & Management

Target Concept	Explanation
1. Pain is normal, personal and always real.	All pain experiences are normal and are an excellent, though unpleasant response to what your brain judges to be a threatening situation. All pain is real.
2. There are danger sensors, not pain sensors.	The danger alarm system is just that – there are no pain sensors, pain pathways or pain endings.
3. Pain and tissue damage rarely relate.	Pain is an unreliable indicator of the presence or extent of tissue damage – either can exist without the other.
4. Pain depends on the balance of danger and safety.	You will have pain when your brain concludes that there is more credible evidence of danger than safety related to your body and thus infers the need to protect.
5. Pain involves distributed brain activity.	There is no single ‘pain centre’ in the brain. Pain is a conscious experience that necessarily involves many brain areas across time.
6. Pain relies on context.	Pain can be influenced by the things you see, hear, smell, taste and touch, things you say, things you think and believe, things you do, places you go, people in your life and things happening in your body.
7. Pain is one of many protective outputs.	When threatened the body is capable of activating multiple protective systems including immune, endocrine, motor, autonomic, respiratory, cognitive, emotional and pain. Any or all of these systems can become overprotective.
8. We are bioplastic.	While all protective systems can become turned up and edgy, the notion of bioplasticity suggests that they can change back, through the lifespan. It is biologically implausible to suggest that pain can’t change.
9. Learning about pain can help the individual and society.	Learning about pain is therapy. When you understand why you hurt, you hurt less. If you have a pain problem, you are not alone – millions of others do too. But there are many researchers and clinicians working to find ways to help.
10. Active treatment strategies promote recovery.	Once you understand pain, you can begin to make plans, explore different ways to move, improve your fitness, eat better, sleep better, demolish DIMs, find SIMs and gradually do more.

MOSELEY, G. L. & BUTLER, D. S. 2015a. *The Explain Pain Handbook: Protectometer*, Adelaide, noigroup.

MOSELEY, G. L. & BUTLER, D. S. 2017. *Explain Pain Supercharged*, Adelaide, Noigroup Publications.



## Fill in the Protectometer

- Indicate your pain level (out of 10) on the Protectometer.
- Try a broad opening 'trigger question' for DIMs and SIMs – *'What are some of the things on life that make you feel safe or threatened/worried'*
- When you identify a DIM or SIM ask if there are any others in the category
- When you identify a DIM, ask if there is SIM in the same category and vice versa. Seek balance
- If the response is hard to categorise then it may be pried apart in two or more categories
- The past or the future can be used (*'Last night it was 4/10' ... 'What was it about last night?'*)
- *Remember, the DIM's and SIM's could be in hard to find places.*

# PROTECTOMETER

You will have pain when your brain concludes that there is more credible evidence of **danger** related to your body than there is credible evidence of **safety** related to your body.

Things you hear, see, smell,  
taste, touch

Things you hear, see, smell,  
taste, touch

Things you say

Things you say

Places you go

Places you go

Things happening in your body

Things happening in your body

DIMS

**DANGER IN ME**

Credible evidence of danger

Things you do

Things you do

Things you think and believe

Things you think and believe

People in your life

People in your life

SIMS

**SAFETY IN ME**

Credible evidence of safety

10 9 8 7 6 5 4 3 2 1 0

no pain zone