



*Treating the Whole Person –
The Integrated Systems Model for Pain & Disability:
An Evidence-Based Approach to
Optimize Function & Performance*

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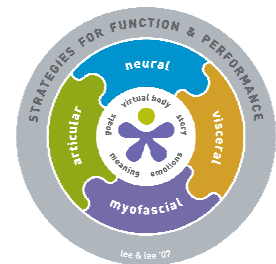
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Physiotherapists spend a considerable number of years gaining the knowledge necessary for their chosen career, and most continue to take post-graduate courses and attend conferences to increase their theoretical knowledge base and technical skill-set available in their 'toolbox'. In the evidence-based era of medicine, physiotherapists are also exhorted to consume an ever-growing amount of information and scientific studies. The challenge in the midst of all this information is to incorporate and integrate the newly learned science and clinical skills into a framework that facilitates wise clinical decisions in day-to-day practice.

Rivett & Jones (2004) have noted that there is a tendency in both courses and conferences to neglect an essential component of daily clinical practice – *clinical reasoning*. How does the clinician organize both old and new knowledge, clinical experiences and the emerging scientific findings? Without a framework to organize knowledge, clinical decision-making becomes increasingly difficult.

The Integrated Systems Model (ISM) for Pain & Disability (Lee & Lee, 2007) is a framework to understand and interpret the unique picture of each individual patient in the clinical context to facilitate decision-making and treatment planning. The model provides a context to organize all the different types of knowledge needed (scientific, theoretical, professional craft, procedural, and personal) and provides for the development and testing of multiple hypotheses as the multidimensional picture of the patient emerges. It also facilitates clinical reasoning 'on the fly' as the patient's story unfolds and the clinician begins to understand the significant pieces of their tapestry. A multimodal treatment plan can then be designed based on the complete picture of the person and their presenting problem(s), tailored around their *meaningful task(s)*.



The ultimate goal of *The Integrated Systems Model* approach is to facilitate better strategies for function and performance; that is, to help patients change the way they live, move and experience their bodies. Teaching new strategies for function and performance relies heavily on the capacity of the nervous system for change - the art and science of neuroplasticity - which gives human beings amazing potential for transformation in both physical and emotional

realms. But how do we help our patients change how they perform habitual, automatic, and well established postural and movement strategies?

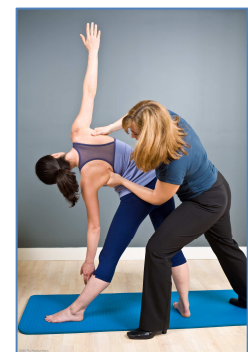
Any functional task, whether it be sustained postural positions or dynamic activities, requires integration of all regions of the body. When a patient presents with pain, along with functional limitations, the clinician must determine whether the driving cause for the pain experience and loss of function is intrinsic or extrinsic to the painful region. In order to make this decision, it is often not sufficient to only assess function of the painful region during functional tasks. The therapist must also determine if painfree dysfunction exists in other parts of the body and then assess the interactions between both painful and painfree areas of dysfunction. This is an essential clinical reasoning process that enables the therapist to determine how all areas of the body are linking and interacting with each other during total body function. By considering the connections between all parts of the body, the patient's injury history and pain experience can be better reasoned and explained.

This course, *The Integrated Systems Model for Pain & Disability - An Evidence-Based Approach to Optimize Strategies for Function & Performance*, highlights the key features of this model as it applies to treating impairments of the trunk (from the thorax to the pelvis) and lower extremity to optimize total body function & performance. It lays the foundation for understanding how to restore movement and control within and between the thorax, pelvis and lower extremity and how the interaction between these regions impact the rest of the body.

At the conclusion of this course, participants will have new skills in assessing load transfer through the trunk (from the 4th thoracic ring to the pelvic floor) and lower extremity as well as performing segmental thoracic and pelvic ring analysis for mobility and control. Moreover, participants will understand how to design a multimodal treatment program (including education, manual therapy, neuromuscular release, and movement training) to restore function and performance for any patient (from postpartum moms to elite level athletes) since the principles are applicable to all groups of patients. The participants will learn novel concepts and skills developed Diane Lee & Linda-Joy (LJ) Lee unique to Discover Physio courses and taught completely in the Discover Physio Series (www.discoverphysio.ca).

Aims & Learning Outcomes

- 1) Discuss current research and the requirements for optimal function and performance.
- 2) Discuss new definitions and perspectives on stability from the science, and how stability relates to optimal performance.
- 3) Illustrate how the Integrated Systems Model (Lee & Lee) provides a framework to find the underlying driver for the patient's problem - whether this is pain, loss of stability, loss of performance, or other disability.
- 4) Define "meaningful assessment" and why it is essential in creating an environment to enhance neuroplastic change - the route to changing the patient's experience of their body.
- 5) Demonstrate and practice some key clinical tests for the thorax, lumbar spine, pelvis/hip, knee and foot to determine whether or not



- a patient is using an optimal strategy for function & performance for their chosen task and when there are multiple sites of impairment, how to determine the 'primary driver' or impairment to be addressed first.
- 6) Demonstrate and practice techniques developed by Linda-Joy (LJ) Lee and Diane Lee for the analysis of segmental thoracic and pelvic ring mobility and control.
 - 7) Illustrate the clinical reasoning process required to determine if the thorax, the lumbar spine, pelvis, hip, or foot is the primary driver for loss of optimal function (develop reflection skills using The Integrated Systems Model Clinical Puzzle).
 - 8) Discuss the new developments in neuroplasticity and how these relate to assessment and treatment and how to create a rehab environment that facilitates optimal strategies for total-body function and performance.

Discover Physio is an educational company founded in 2007 as a result of several years of individual effort and collaboration between Linda-Joy (LJ) Lee and Diane Lee. Their joint passion in Discover Physio is to help people - both patients and therapists - to explore the possibilities and reach their potential through innovative, high-quality educational experiences. The 4th edition of The Pelvic Girdle (newly released December 2010) is testimony to the fruit of this collaboration.

