Course Description
Low back pain, posterior pelvic pain and groin pain are common problems seen in clinical practice. Research in the last decade has greatly increased our understanding of muscle and joint function, leading to the development of new models such as The Integrated Model of Function (Lee/Vleeming). This model highlights the interplay of form closure, force closure, motor control, and emotional components in restoring optimal function.

The Lumbopelvic-hip Complex – An integrated approach is an evidence based course that reviews the recent advances in science and presents a clinical application for assessment and treatment based on the integrated model. This course presents a structural framework for clinical decision making which enables the therapist to decide when and why different treatment interventions should be applied for successful rehabilitation.

Based on specific assessment tests, the clinician will learn how to integrate joint mobilization techniques, myofascial release techniques, stabilization exercises as well as functional integration exercises into a complete multimodal program which is patient specific i.e. prescriptive - and thus most effective. On this course, this model of assessment and treatment will be applied to dysfunction within the lumbar spine, pelvic girdle and hip.

This course is based on a functional model, as opposed to one which seeks to identify pain generators. In this way, movement and control are optimized within and between the lumbar spine, pelvis, and hip. The ultimate goal is to restore function such that there is mobility as well as stability without rigidity of posture and without episodes of collapse: “Restoring Stability with Mobility”.

Course Outline/Objectives
This course will cover the:

• research which led to the development of the Integrated Model of Joint Function – Vleeming/Lee (Incorporating the findings of world reknowned researchers such as Vleeming & Snijders, Richardson, Jull, Hodges, Hides, Hungerford, Sturesson, Panjabi, Danneels, Damen and O’Sullivan).
• biomechanics of the lumbar spine, pelvis, and hip based on recent research findings.
• current knowledge on how stability is achieved for effective load transfer through the low back, pelvis and hip.
• clinical tests which examine:
  • posture – learn how to perform regional and segmental postural assessment
  • functional movement - identify the sites (segments) of failed load transfer in the low back, pelvis and lower extremity.
joint mobility/stability (form closure - specific segmental mobility and stability tests for the joints of the lumbar spine, pelvic girdle and hip).
- the muscle systems: local and global muscle systems of the lumbopelvis (the core and the slings for force closure/motor control).
- common patterns of dysfunction including those of excessive compression (stiff joints, hypertonic global muscle system, joint fixation) and insufficient compression (loose joints, insufficient recruitment of the local muscle system).
- development of an effective treatment program including when and how to use manual therapy, education and exercise.
- specific mobilization techniques for the joints of the lumbar spine, pelvis and hip including direct mobilization and indirect segmental and regional myofascial release techniques – reducing rigidity using manual therapy and breath work.
- the protocol for an evidence-based stabilization exercise program and the role of external supports such as lumbar braces, sacroiliac belts, and taping in augmenting stabilization therapy.
- exercises for restoring a neutral spine and hip position. Techniques to restore neutral spine position in supine, sitting, supported standing, and standing will be practiced with a focus on the lumbopelvic-hip alignment.
- motor control training for the local muscle system – isolation and awareness training which extensively uses imagery and touch for facilitation. The focus will be on how to find the optimal strategy (best patient position, image, manual and verbal cues) for your patient.
- cues and techniques to facilitate coordination of the local and global muscle systems during functional activities and exercises.

At the conclusion of this three day seminar, the participant will have an understanding of how the “Integrated Model of Function” applies specifically to the low back, pelvic girdle and hip. In addition, the participant will have an increased understanding of how to design a multimodal treatment program which includes manual therapy and exercise from early rehabilitation to functional integration.

Course Preparation
To get the most from this course it is advised that the participant download and read Chapter 5 – Principles of the Integrated Model of Function from the 3rd edn of “The Pelvic Girdle” found at www.dianelee.ca. If necessary, review your anatomy.
The Lumbopelvic-hip Complex - An Integrated Approach

Course Requirements

Wear comfortable clothing including shorts/sports bra which are suitable for examination of the low back, pelvis and lower extremity. If possible, bring a six foot piece of yellow theraband, a hip mobilization belt and an exercise ball/stability ball.

Course Developers & Instructors – Diane Lee & Linda-Joy Lee

Diane Lee BSR, FCAMT, MCPA

Diane Lee is a Physical Therapy graduate from the University of British Columbia, Canada, 1976. She qualified with distinction as a Fellow of the Canadian Academy of Manipulative Therapists in 1981 and went on to instruct and examine in the Canadian Orthopaedic post-graduate education system for 18 years. Currently, Diane is an education and clinical consultant at Diane Lee & Associates in White Rock, British Columbia, and is well known both nationally and internationally for her clinical work on pelvic dysfunction. She has integrated the recent scientific research on lumbopelvic function into a clinical model for assessment and treatment. This model was developed in conjunction with Dr. Andry Vleeming. She is currently collaborating with Linda-Joy Lee on the clinical application of this model. In addition to lecturing internationally on this topic, Diane is an editorial advisor for the journal Manual Therapy as well as the Journal of Manual and Manipulative Therapy and a Scientific Committee member for the Interdisciplinary World Congress on Low Back and Pelvic Pain.

Linda-Joy Lee BSc, BSc(PT), FCAMT, MCPA, PhD Candidate

Linda-Joy is a Physical Therapy graduate from the University of British Columbia, Canada, and UBC Wesbrook Scholar (1996). “LJ” became a Fellow of the Canadian Academy of Manual and Manipulative Therapists in 1999 with distinction and completed her certification in Intramuscular Stimulation (IMS) in July 2001. LJ is a clinical and education consultant at Synergy Physiotherapy in North Vancouver, BC. LJ has co-taught with Diane Lee since 2000, and is currently collaborating with Diane on several projects relative to the Integrated Model of Function. She developed the “Training the Trainers” course to complement Diane’s Postpartum Health for Moms educational program. LJ published a chapter on “Restoring Force Closure/Motor Control of the Thorax” in the book “The Thorax: An Integrated Approach” by Diane Lee and co-authored two chapters in the 3rd edition of “The Pelvic Girdle” by Diane Lee. In addition, she co-produced, along with Diane, a 4.5 hour DVD titled “An Integrated Approach to the Assessment and Treatment of the Lumbopelvic-Hip Region”. Passionate about new challenges, LJ is also pursuing a PhD investigating motor control of the thoracic spine and its relation to the lumbopelvic region at The University of Queensland with Professor Paul Hodges.