### **20 YEARS OF OPTIMISED MOVEMENT HEALTH**



# MASTERCLASS

### MANAGING MOVEMENT: IMPAIRMENTS OF THE LOWER LEG

## **COURSE INTRODUCTION:**

Pathologies of the lower leg are both common and problematic to sustaining function and performance for old and young alike. But what is the influence of movement quality on their aetiology, chronicity and recurrence?

This course details a comprehensive clinical framework of movement assessment and retraining to tackle both common and not so common presentations of the knee, ankle and foot.

The course supplies the 'hands on' skills to use movement as the tool of assessment and retraining to manage leg, thigh, patello-femoral, shin pain and foot pain.

## **COURSE OUTLINE:**

The knee, foot and ankle possess multiple degrees of freedom, allowing the lower leg to be highly versatile but also highly complex as a functional unit. Adding to this complexity are the multi-planar, open and closed chain demands of gait and the large number variables (including pain, restriction, previous injury) with the potential to alter movement during the stance or the swing phase.

This 2-day course supplies clinicians with a systemised framework of movement assessment and retraining to manage this complexity, addressing pain, pathology and compromised function associated to movement at the knee, foot and ankle.

The student will develop skills of movement evaluation, looking at the co-ordination patterns and muscle recruitment strategies that represent the building blocks of the full gait cycle. This process of assessment then allows for each patient to be considered as a unique individual, supporting clinical reasoning and the implementation of highly specific movement interventions to manage pain, pathology and compromised function.



## **KEY FEATURES:**

- Highly specific evaluation of muscle synergies and co-ordination patterns of the lower limb
- Connecting movement impairments of the lower limb to pain, pathology and compromised function
- The development of impairment-specific retraining programmes to regain functional control of the lower leg based on a clinical reasoning framework

### **LEARNING OUTCOMES**

#### At the end of this course the participant should be able to:

- Show an understanding of the different phases of gait including single and double leg support, weight transfer over the foot and the sagittal and rotational components
- Demonstrate an understanding of the presence of movement control impairments during gait
- Explain the relationship between the development of uncontrolled movement and the presence of a number of factors such as restriction, pain and previous injury
- Demonstrate an ability to deliver and evaluate the results of cognitive movement control tests of the lower leg, ankle and foot and identify the site and direction of uncontrolled.
- Demonstrate an ability to deliver a management process for each movement control impairment to include retraining synergies, co-ordination and restrictions
- Demonstrate an ability to connect specific movement control impairments to clinical scenarios and presentation.



#### PAGE 4

### **PROGRAMME OUTLINE:**

- Gait: single and double leg support, weight transfer over the foot and the sagittal and rotational components
- Movement Impairments during gait
- Alignment Evaluation of the Lower Limb & Structural vs Functional Impairments
- Movement Control Impairments at the knee- tests, retraining (including synergies), restrictions and pattern recognition.
- Movement Control Impairments at the foot and ankle tests, retraining (including synergies), restrictions and pattern recognition,
- Patterns in common clinical presentations, shin splints, Achilles pain, plantar pain

### **PROGRAMME:**

#### DAY ONE:

**9.00 - 10.30** Understanding gait - Control of sagittal and rotational components Movement impairments during gait

#### 10.30 -10.50 Coffee

**10.50 - 12.30** Rotational alignment evaluation / Sagittal alignment evaluation / Structural vs functional impairments

#### 12.30 - 13.30 Lunch

**13.30 - 15.00** Movement control impairments at the knee- tests, retraining (including synergies), restrictions.

15.00 - 15.20 Tea

15.20 - 17.00 Pattern recognition & clinical scenarios including ITB Impairments



#### DAY TWO:

**9.00 - 10.30** Pattern recognition & clinical scenarios including patello-femroal impairments Movement Control Impairments at the ankle and foot - tests

10.30 - 10.50 Coffee

**10.50–12.30** Movement Control Impairments at the ankle and foot – tests, retraining (including synergies), restrictions and pattern recognition.

- 12.30 13.30 Lunch
- 13.30 15.00 Continue
- 15.00 15.20 Tea
- 15.30 16.00 /17.00 Clinical scenarios

Matching movement retraining solutions to the client's / patient's goals and priorities. Where next?

#### (Programme subject to change)

