**OVERVIEW: October 5 – 8, 2019**

**Advanced Application of the Examination, Diagnosis and Treatment of Movement System Impairment Syndromes of the Lower Quarter**

The advanced application course is open only to physical therapists and physicians. The course consists of lectures and related research about movement system impairment (MSI) syndromes of the low back, hip, knee, and ankle. This course provides concentrated lab time supervised by Washington University Faculty. Each participant will have the opportunity to examine a patient with a faculty member in a semi-private setting. After completing this four-day course, each participant will be able to conduct a movement-based examination of the lower quarter, determine a MSI diagnosis based on the examination results, and apply movement system concepts to prescribe a treatment program.

**NEW THIS YEAR** will be a presentation on the spectrum of movement in treatment. The spectrum begins with exercises designed for precision of movement and builds toward sports specific movement and performance training. In addition, participants will receive information applying MSI concepts to strengthening, fitness, and performance testing.

**Day 1 (October 5, 2019)**

The course will begin the day with an update on the concepts of the movement system applied to MSI syndromes of the low back. Considerations of abdominal and paraspinal muscle function and testing will be discussed. The afternoon will be primarily lab including the demonstration and practice of tests of the lower quarter. The day will end with a presentation of a movement spectrum applied to basic exercises for precision of movement to more complex sports specific training.

**Day 2 (October 6, 2019)**

The focus of the lectures will be on MSI syndromes of the hip. Students will learn to apply MSI concepts to non-operative and post-surgical care for individuals with osteoarthritis, FAI, and hip dysplasia. Lab sessions will include practice of specific tests for the hip and complete examinations on individuals with hip or low back pain. After the examination, participants will be guided in a discussion regarding the diagnosis and treatment for those individuals.

**Day 3 (October 7, 2019)**

The focus of the lectures will be on MSI syndromes of the knee. Lab sessions will include practice of specific tests for these regions and complete examinations on individuals with knee, hip, or low back pain. After the examination, participants will be guided in a discussion regarding the diagnosis and treatment for those individuals. The day will end with a presentation on application of MSI concepts to strengthening and fitness activities

**Day 4 (October 8, 2019)**

The focus of the lectures will be on MSI syndromes of the ankle. Lab sessions will include practice of specific test for the ankle and complete examinations on individuals with ankle, knee, hip, or low back pain. After the examination, participants will be guided in a discussion regarding the diagnosis and treatment for those individuals. Finally, participants will practice exercise progressions and assessment of movement during performance testing.