

Title of Course: Innovative Strategies for the Management of Low Back Pain: From Manual Therapy to Neuromuscular Control

Speaker: Christopher H. Wise, PT, DPT, PhD(c), OCS, FAAOMPT, MTC, ATC

Biography:

Christopher H. Wise, PT, DPT, PhD(c), OCS, FAAOMPT, MTC, ATC received his PT degree from Arcadia University and his DPT degree from Widener University. Dr. Wise is a certified athletic trainer (ATC), certified manual therapist (MTC), has received his board certification as a clinical specialist in orthopaedics (OCS) and is a Fellow of the American Academy of Orthopaedic Manual Physical Therapists (FAAOMPT). He is currently in the dissertation phase of his PhD at Nova Southeastern University in a project entitled, *“The Effect of Sacroiliac Joint Non-Thrust Manipulation on Muscle Thickness of the Sacral Multifidi, Lumbar Active Range of Motion, and Self-Reported Pain in Individuals with Low Back Pain”*.

Dr. Wise is the founding Chair of the Department of Physical Therapy at Alvernia University in Reading, PA. Prior to coming to Alvernia, Dr. Wise was Clinical Associate Professor in the Institute for Physical Therapy Education at Widener University and former Program Director for the PTA Program at Alvernia. He has engaged in active clinical practice in providing care for individuals with musculoskeletal impairments for over 25 years. Along with his wife, he is owner of WISE Physical Therapy, LLC, an orthopaedic outpatient private practice in Kutztown, PA. He was also previous owner of WISEfeet, P.C., a functional foot orthotic prescription service, and co-owner of Therapeutic Articulations, LLC, a provider of educational resources for Physical Therapists.

Dr. Wise's clinical and research interests lie in the areas of orthopaedic manual physical therapy of the spine and lower extremity biomechanics. In the past 10 years, he has produced 18 peer-reviewed disseminations, including 6 publications, 2 of which are textbooks (*“Mobilization Notes: A Rehabilitation Specialists Pocket Guide”* in 2009 and *“Orthopaedic Manual Physical Therapy: From Art to Evidence”* in 2015 [F.A. Davis]). He has also initially co-authored an iPod application entitled, “iOrtho+”, which is currently available on the iTunes and Android markets. He has developed and presented over 25 continuing education seminars over the past 10 years in the area of orthopaedic manual physical therapy.

Description:

This interactive, hands-on continuing education experience is designed for the rehabilitation professional who is interested in pursuing innovative, effective, and eclectic strategies for the management of individuals with Low Back Pain. Throughout the seminar, an emphasis will be placed on utilizing the current best evidence to support the **Orthopaedic Manual Physical Therapy (OMPT)** and **Functional Neuromuscular Control Training** strategies that are proposed. Course content will include a review of the **Lumbopelvic Hip Complex** as the foundation for introducing a **Neuro-Mechanical Model** to the management of low back pain. An **impairment-based** approach to differential diagnosis will be used to guide examination and intervention. The hands-on lab component will focus on developing proficiency in an essential skill set of OMPT techniques that may be immediately translated into clinical practice. An emphasis will be placed on clinical decision-making and the integration of manual techniques into a comprehensive examination and intervention plan.

Objectives:

At the conclusion of this course, the participant will be able to:

- Understand the relationship between **structure and function** and its implications on the development of a **Neuro-Mechanical Model** in the management of low back pain
- Perform critical examination procedures using **Manual-Motor Integration** techniques leading to **impairment-based diagnostic classification** that guides intervention and determines outcomes
- Demonstrate proficiency in the performance of an **essential skill set** of effective **Orthopaedic Manual Physical Therapy (OMPT)** procedures that may be immediately incorporated into clinical practice that are integrated with functional training
- Utilize the **current best evidence** related to the management of low back pain to develop an **innovative and strategic** approach that endeavors to balance spinal **stability with mobility**

Outline:

- Functional Anatomy and Neuro-Mechanics of the Lumbo-Pelvic-Hip Complex (LPHC)
- Theoretical Framework for a Neuro-Mechanical Model in the Management of Low Back Pain
- Neuro-Mechanical Examination Procedures: Part I
- Neuro-Mechanical Examination Procedures: Part II
- Orthopaedic Manual Physical Therapy (OMPT) Procedures and Manual-Motor Integration
- Debriefing and Case Studies

Total Hours: 6

Direct Access Hours: 6

References:

Sadeghisani M, Manshadi FD, Kalantari KK, et al. Correlation between hip rotation range-of-motion impairment and low back pain. A literature review. *Ortop Traumatol Rehabil.* 2015;17(5):455-462.

Vleeming A, Schuenke MD, Masi AT, Carreiro JE, Danneels L, Willard FH. The sacroiliac joint: an overview of its anatomy, function and potential clinical implications. *J. Anat.* 2012;221:537-567.

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Hosseini M, Akbari M, Behtash H, Amiri M, Sarrafzadeh J. The effects of stabilization and McKenzie exercises on transverse abdominis and multifidus muscle thickness, pain, and disability: A randomized controlled trial in non-specific chronic low back pain. *J Phys Ther Sci.* 2013; 25(12):1541-1545.

Kong Y, Park S, Kweon M, Park J. Change in trunk muscle activities with prone bridge exercise in patients with chronic low back pain. *J Phys Ther Sci.* 2016;28(1):264-268.