

Movement-Based Management of Lower Quarter Dysfunction:

From Biomechanical Mechanisms to Clinical Application



Course Instructors



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Presents

Movement-Based Management of Lower Quarter Dysfunction:

From Biomechanical Mechanism to Clinical Application

April 3 – 4 2027

Course Location

Azusa Pacific University

701 E. Foothill Blvd.

Azusa, CA 91702

Christopher Powers, PT, PhD, FAPTA

Dr. Powers is the founder and owner of the Movement Performance Institute. In addition, he is Professor and Associate Chair in the Division of Biokinesiology and Physical Therapy at the University of Southern California and Director of the Musculoskeletal Biomechanics Research Laboratory. Dr. Powers earned his Bachelor's degree from the University of California, Santa Barbara, his Master's degree in Physical Therapy from Columbia University, and a Ph.D. in Biokinesiology from USC. He completed post-doctoral training at University of California, Irvine.

An internationally recognized leader in human movement science, Dr. Powers' research has advanced understanding of lower-extremity biomechanics and their role in musculoskeletal injury. His work has helped inform evidence-based approaches to the prevention and treatment of knee pain and sports-related injuries. He has authored more than 230 peer-reviewed publications and has received funding from the National Institutes of Health and other agencies to support his research.

Dr. Powers is a Fellow of the American College of Sports Medicine and a Catherine Worthingham Fellow of the American Physical Therapy Association, the Association's highest honor. He is also a member of the American Society for Biomechanics, International Society for Biomechanics, and Gait and Clinical Movement Analysis Society.

Clare Frank, PT, DPT, MS

Dr. Frank received her physical therapy degree from Northern Illinois University. She completed the Kaiser Permanente Orthopedic Residency program in 1993 while working on her Master of Science degree in Physical Therapy & Biokinesiology at University of Southern California. She then went on to receive her post-professional doctorate degree from Western University of Health Sciences, Pomona, California in 2003. She is a board-certified specialist in Orthopedic Physical Therapy (OCS) and a fellow in the American Academy of Orthopedic Manual Physical Therapy (FAAOMPT).

Dr. Frank is the director and founder of Movement Links, Inc., an educational company promoting a deeper understanding and application of the movement system approach. She also serves as a clinical instructor and preceptor for the Spine Rehabilitation Fellowship at Kaiser Permanente, Los Angeles. She served as the Program Director of Azusa Pacific University Advanced Clinical Fellowship in Movement & Performance (2016-2022), the medical team for the 2009 World Figure Skating Championships held in Los Angeles, rehab & performance team for the Chinese Olympic National Training Center in Beijing, China (2010-2018).

Dr. Frank has co-authored "Assessment and Treatment of Muscle Imbalances: The Janda Approach". She is also a certified instructor for Kolar's Approach to Dynamic Neuromuscular Stabilization and a certified practitioner in the Vojta Approach. Dr. Frank continues to maintain a limited private practice in the Los Angeles area and teaches in the U.S. and internationally.

Course Description

Altered movement patterns can influence how stress and strain are distributed across the tissues of the lower quarter, contributing to pain, injury, and impaired function. Effective movement-based care requires clinicians not only to recognize these patterns, but also to determine why they occur and how they can be modified. This evidence-informed, laboratory-based course integrates biomechanical principles with hands-on clinical examination and intervention. Participants will learn to analyze movement during gait and functional activities, identify movement impairments associated with excessive tissue loading, and evaluate the physical and neuromuscular factors contributing to those impairments. Laboratory sessions will emphasize observational movement analysis, muscle performance assessment, palpation and handling skills, neuromuscular facilitation and inhibition, movement retraining, and corrective exercise. Clinical cases involving the foot and ankle, knee, hip, and lumbopelvic region will be used to demonstrate how examination findings inform treatment selection and progression. By integrating movement analysis, tissue-loading principles, and applied treatment strategies, participants will develop a systematic approach for translating movement science into individualized clinical care.

Instructional Level: Basic

Instructor-Student Ratio: 1:16

Course Objectives

Describe the biomechanical concepts of stress and strain and their relationship to tissue loading and musculoskeletal injury.

Describe how movement patterns influence the application of stress on tissues of the lower quarter.

Identify key movement impairments associated with strain during functional activities.

Describe ideal respiration and intra-abdominal pressure regulation as the foundation of posture.

Refine neuromuscular facilitatory and inhibitory techniques for optimal neuromuscular function and movement.

Develop treatment strategies to reduce excessive stress and strain, redistribute load, and improve tissue capacity through specific interventions.

Course Agenda

DAY 1

AM Biomechanical foundations and stress strain concepts.
Movement impairments and their effects on tissue loading. Evidence related to common lower-quarter conditions.

PM Clinical movement analysis framework.
Hands-on muscle and movement examination.

DAY 2

AM Clinical conditions associated with mechanical load.
Intervention strategies for movement impairments & load management.

PM Neuromuscular facilitation and inhibition.
Movement correction and therapeutic exercise.
Case integration and treatment decision-making

Registration

April 3 – 4, 2027

Day 1: 8:30 am – 5:00pm

Day 2: 8:30 am – 5:00pm

Registration Fee: \$600

Website: www.movementlinks.com

Contact: info@movementlinks.com

1.4 CEUs (14 contact hours)

Pending approval by California Physical Therapy Association.

Approved by BOC for athletic trainers.