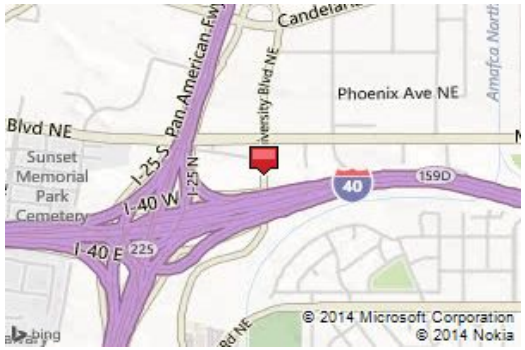
Address Correspondence:

Attn: Patrick Vigil PT, DPT
Paradigm Physical Therapy and Wellness
535 US Highway 314
Los Lunas, NM 87031
(505) 866-0055
pvigil@paradigmnm.com

Crowne Plaza Hotel
1901 University Blvd
Albuquerque, NM 87102
(505) 884-2500



ON FACEBOOK AT
www.facebook.com/ParadigmNM

Functional Biomechanics of the Lower Quarter:

Implications for the Evaluation and Treatment of Musculoskeletal Disorders

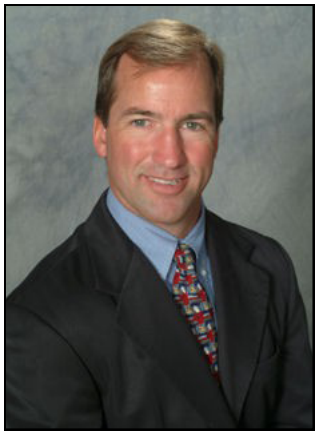
COURSE FACULTY :
Christopher M. Powers, PT, PhD, FAPTA

Saturday & Sunday
August 9 - 10, 2014

SPONSORED BY:

Science Applied Artfully
Paradigm
Physical Therapy & Wellness
Los Lunas 505-866-0055
Belen 505-861-1200
Bernalillo 505-771-2447
www.paradigmnm.com

The Speaker



Dr. Christopher M. Powers, PT, PhD, FAPTA: Dr. Powers is an Associate Professor in the Division of Biokinesiology & Physical Therapy and Co -Director of the Musculoskeletal Biomechanics Laboratory at the University of Southern California. He also works in the Departments of Radiology and Orthopaedic Surgery within the Keck School of Medicine. His primary teachings and frequent lectures include the kinematic, kinetics and muscular actions associated with human movement, the pathomechanics of orthopedic disabilities, and issues related to rehabilitation of the musculoskeletal system. Dr. Powers has published 120 peer-reviewed articles and has received several research awards from the American Physical Therapy Association, including the Rose Excellence in Research Award from the Orthopaedic Section, the Eugene Michels New Investigator Award, the Dorothy Briggs Scientific Inquiry Award and the Helen J. Hislop Award for contributions to the professional literature.

Dr. Powers is a Fellow of the American College of Sports Medicine and a member of the American Physical Therapy Association (Orthopaedic and Research sections), American Society for Biomechanics, American Society for Testing and Measures, and the North American Society for Gait and Clinical Movement Analysis. In addition, Dr. Powers is on several editorial boards including the Journal of Applied Biomechanics, Journal of Orthopaedic and Sports Physical Therapy, and the Journal of Athletic Training. He is an active member of the American Physical Therapy Association, serving as President of the Section on Research.

Registration Form

Functional Biomechanics of the Lower Quarter: Implications for the Evaluation and Treatment of Musculoskeletal Disorders

Saturday & Sunday August 9 - 10, 2014

Name _____

Address _____

_____

Phone # _____

E-mail: _____

Registration Deadline: July 31, 2014

This course has been approved by the state of NM for 1.5 CEU's or 15 contact hours.
Approval # NM03113

☐ Registration (before July 21) $ 450

☐ Late Registration (after July 21) $ 500

TOTAL..... $_____

Make Checks Payable and Mail To:

Paradigm Physical Therapy
Patrick Vigil PT, DPT
535 US Highway 314
Los Lunas, NM 87031

For More Information Call: (505) 866-0055
Or Email: pvigil@paradigmnm.com

Course Description

Altered lower quarter mechanics are frequently implicated as being contributory to various musculoskeletal conditions. An understanding of how abnormal limb function can contribute to the mechanisms of specific joint dysfunction is essential for the evaluation and treatment of common orthopaedic disorders. This evidence -based course will review the anatomy and mechanics of the lower kinetic chain, particularly in relation to specific pathologies of the ankle, knee and hip. Emphasis will be placed on current research findings in the areas of gait analysis, lower limb function, and joint biomechanics. Implications for the evaluation and treatment of various musculoskeletal conditions also will be addressed.

Course Objectives

Describe the normal anatomy and biomechanics of the foot/ankle, knee and hip.

Describe the normal joint kinematics, kinetics and muscle actions during walking and running.

Describe the normal interaction of the hip, knee, ankle and foot during walking and running.

Compare and contrast the biomechanical differences among the various running styles (heel strike, midfoot strike, forefoot strike).

Describe the influence of footwear on running mechanics

Describe common impairments during walking and running

Describe the current literature related to the mechanisms of lower extremity injury.

Plan appropriate treatment interventions based on a biomechanical assessment of the lower extremity.

Schedule

Saturday August 9

8:00-8:30	Introductions & course overview
8:30-10:00	Normal gait mechanics: kinematics, kinetics, muscle actions
10:00-10:15	Break
10:15-12:00	Running mechanics & footwear
12:00-1:00	Lunch on your own
1:00-2:00	Pathomechanics of the lower quarter (proximal & distal influences)
2:00-3:00	Common gait deviations
3:00-3:15	Break
3:15-4:15	Common movement impairments during running
4:15-5:00	Functional evaluation of lower quarter pathomechanics

Sunday August 10

8:00-9:00	Ankle joint: Pathomechanics of injury and treatment considerations
9:00-10:00	Knee joint: Pathomechanics of injury and treatment considerations
10:00-10:15	Break
10:15-11:15	Patellofemoral joint: Pathomechanics of injury and treatment considerations
11:15-12:00	Hip joint: Pathomechanics of injury and treatment considerations
12:00-1:00	Lunch on your own
1:00-2:00	Influence of hip muscle weakness on spine mechanics
2:00-3:00	Intervention strategies for lower chain dysfunction
3:00-3:15	Break
3:15-4:45	Therapeutic exercise and progression: A proximal approach
4:45-5:00	Summary/adjourn