## Scott A. Biely, PT, DPT, PhD, OCS, MTC

Dr. Scott Biely is an Associate Professor at Neumann University and teaches in the Physical Therapy Program. He received his Bachelor's Degree in Physical Therapy and his Master's Degree in Orthopaedic Physical Therapy from the University of Pittsburgh and his Doctor of Physical Therapy Degree from the University of St. Augustine. He recently received a PhD degree from Drexel University where he researched the effects of low back pain and lumbar instability on movement.

Dr. Biely has completed advanced studies in Spinal and Extremity Mobilization and Myofascial Manipulation and received a Certification in Manual Therapy from the University of St. Augustine. He has also been recognized as a Board Certified Specialist in Orthopaedic Physical Therapy by the American Physical Therapy Association.

In addition to his duties at Neumann University, Dr. Biely is a staff physical therapist at Optimum Physical Therapy in West Chester where he specializes in treating patients with spinal dysfunction. He has conducted numerous programs in industrial and education settings on back care and has lectured nationally on functional stabilization exercises and spinal mobilization.

## **Instructor for the Following Courses:**

Fall:

PT 518 Biomechanics – 4 credits

PT 725 Musculoskeletal Physical Therapy III – 2 credits

PT 741 Evidence Based Case Study II – 1 credit

# Spring:

PT 617 Musculoskeletal Physical Therapy II – 3 credits

PT 640 Evidence Based Case Study I - 1 credit

#### Summer:

PT 611 Musculoskeletal Pathology – 1 credit

PT 616 Musculoskeletal Physical Therapy – 5 credits

### **Recent Publications and Abstracts:**

Biely SA, Silfies S, Smith S. Hicks G. Clinical observation of standing trunk movements: what do the aberrant movement patterns tell us. *J Orthop Sports Phys Ther*. 2012;42(1):A37-38.

Albaugh KW, Biely SA, Cavorsi JP. Use of a biocellulose dressing to deliver topical Vancomycin, reduce methicillin resistant staphylococcus aureus (MRSA) and Gram positive organisms, and promote healing in lower extremity wounds. WOUNDS. 2011;23(3): A26.

Biely SA, Smith S, Haddad A, Silfies S. Reliability and validity of clinical observation of lumbopelvic rhythm. *J Orthop Sports Phys Ther*. 2010;40(1):A72-73.

Biely SA, Ream A, Smith SS, Silfies SP. Improvement in trunk movement pattern in a patient with low back pain. *J Orthop Sports Phys Ther*. 2009;39(1):A31.

Silfies SP, Bhattacharya A, Biely S, Smith S, Giszter S. Trunk control during standing reach: a dynamic system analysis of movement strategies in patients with mechanical low back. Gait & Posture. 2009;29(3):370-6.

Biely SA, Bhargava A, Silfies SP. Analysis of movement coordination of the lumbar spine and pelvis between patients with mechanical low back pain attributed to osteoligamentous damage and controls. *J Orthop Sports Phys Ther*. 2006;36(1):A15-16.

Biely SA, Smith SS, Silfies SP. Clinical instability of the lumbar spine: diagnosis and intervention. *Orthpaedic Physical Therapy Practice*. 2006;18:11-19.

### **Recent Presentations:**

Platform Presentation – Combined Sections Meeting

Biely SA (presenter), Silfies S, Smith S. Hicks G.

Clinical observation of standing trunk movements: what do the aberrant movement patterns tell us.

Combined Sections Meeting 2012; Chicago, IL February 2012

Poster Presentation – National Meeting of the American Society of Biomechanics (ASB) Wattananon P, Sung W, Biely SA, Silfies S, Canella M. Inter-rater reliability of rating kinematic plots of forward bend movement patterns. 35th Annual Meeting of the American Society of Biomechanics. Long Beach, CA August 2011.

Poster Presentation – Regional Meeting sponsored by Drexel University Wattananon P, Sung W, Biely SA, Silfies S, Canella M. Inter-rater reliability of rating kinematic plots of forward bend movement patterns. Drexel University Research Day. Philadelphia, PA April 2011.

Platform Presentation – Combined Sections Meeting Albaugh KA (presenter), Biely SA, Cavorsi J.

Use of a biocellulose dressing to deliver a topical antibiotic to reduce methylicillin resistant staphylococcus aureus (MRSA) and Gram-positive organisms and enhance wound healing. Combined Sections Meeting 2011; New Orleans, LA February 2011.

Platform Presentation – Local Meeting of the Philadelphia Spine Research Society Biely SA (presenter), Silfies SP, Smith SS.

Clinical utility of observation of aberrant movements during standing forward bend testing: preliminary analysis.

Sixth Annual Philadelphia Spine Research Symposium; Philadelphia, PA December 2010

Poster Presentation – International Meeting of the World Congess for Low Back Pain Biely SA, Silfies SP, Smith SS.

Clinical utility of observation of aberrant movements during standing forward bend testing: preliminary analysis.

World Congress for Low Back Pain 2010; Los Angeles, CA November 2010

Poster Presentation – Regional Meeting sponsored by Drexel University Haddad A, Biely SA, Silfies SP.

Sagittal plane kinematics of the thoracic spine during a forward bending activity: a pilot study.

Drexel University Research Day. Philadelphia, PA April 15, 2010

Poster Presentation – Combined Sections Meeting

Biely SA, Smith S, Haddad A, Silfies S. Reliability and validity of clinical observation of lumbopelvic rhythm.

Combined Sections Meeting of the American Physical Therapy Association. San Diego, CA. February 19, 2010

Platform Presentation – Combined Sections Meeting

Biely S (presenter), Ream A, Smith S, Silfies S.

Improvement in trunk movement patterns in a patient with low back pain.

Combined Sections Meeting of the American Physical Therapy Association. Las Vegas, NV February 2009

Poster Presentation – Regional Meeting sponsored by Drexel University

El-Kerdi A, Mehta R, Biely S, Smith S, Silfies S.

Reliability of techniques to measure trunk neuromuscular control

Drexel University Research Day. Philadelphia, PA

April 2007

Platform Presentation – National Meeting of the ASB

Biely S (presenter), Smith S, Silfies S.

Reliability of kinematic measures of trunk motion: a pilot study.

Northeast American Society of Biomechanics. University of Maryland. College Park, MD 2007

Poster Presentation – Regional Meeting sponsored by Drexel University Movement Coordination of the Lumbar Spine and Pelvis. Drexel University Research Day. Philadelphia, PA April 2006 Honorable Mention

Platform Presentation – Combined Sections Meeting Biely S (presenter), Silfies S.

Analysis of movement coordination of the lumbar spine and pelvis between patients with mechanical low back pain attributed to osteoligamentous damage and controls. Combined Sections Meeting of the American Physical Therapy Association. San Diego, CA. February 2006

# **Current Research:**

Clinical observation of standing trunk movements: what do the aberrant movement patterns tell us.

Clinical observation of standing trunk movements: linking clinical observation to instrumented kinematics

Computerized analysis of standing trunk motion in subjects with and without mechanical low back pain

Identifying the subgroup of patients with mechanical low back pain that have clinical lumbar instability