

Steven Z. George PT, PhD, FAPTA

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Education

August 2002 – January 2004	Post Doctoral Fellowship Pain Research and Rehabilitation Outcomes College of Public Health and Health Professions University of Florida
August 1999 – August 2002	Doctor of Philosophy Rehabilitation Science School of Health and Rehabilitation Sciences University of Pittsburgh
August 1995 - December 1997	Master of Science Orthopedic Physical Therapy School of Health and Rehabilitation Sciences University of Pittsburgh
August 1990 - December 1994	Bachelor of Science, Summa Cum Laude Physical Therapy School of Medicine West Virginia University

Licensure

April 27 th , 2006 – present	Licensed Physical Therapist State of Florida License #22663
April 3 rd , 1995 – present	Licensed Physical Therapist Commonwealth of Pennsylvania PT – 008791-L

Employment

Academic Positions

September 2016 – present	Professor (tenured) Director of Clinical Research Department of Orthopaedic Surgery Director of Musculoskeletal Research Duke Clinical Research Institute Duke University Durham, NC
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April 2013 – August 2016	Director, Brooks-PHHP Research Collaboration College of Public Health and Health Professions University of Florida Gainesville, FL
May 2012 – August 2016	Director, Doctor of Physical Therapy Program Department of Physical Therapy University of Florida Gainesville, FL
July 2016 – August 2016	Professor (tenured) Department of Physical Therapy University of Florida Gainesville, FL
December 2009 – December 2014	Assistant Department Chair Department of Physical Therapy University of Florida Gainesville, FL
July 2009 – June 2016	Associate Professor (tenured) Department of Physical Therapy University of Florida Gainesville, FL
January 2004 – June 2009	Assistant Professor (tenure accruing) Department of Physical Therapy University of Florida Gainesville, FL
August 2002 – January 2004	Research Fellow Department of Clinical Health Psychology Department of Physical Therapy University of Florida Gainesville, FL
June 2000 - August 2002	Study Coordinator Department of Physical Therapy University of Pittsburgh Pittsburgh, PA
December 1999 – June 2000	Research Assistant Department of Physical Therapy University of Pittsburgh Pittsburgh, PA
<u>Clinical Positions</u> December 1999 – August 2002	Casual Call/Part-Time Staff Therapist Centers for Rehab Services/UPMC Pittsburgh, PA

June 1997 - December 1999

Facility Director
Centers for Rehab Services/UPMC
Pittsburgh, PA

January 1995 - June 1997

Staff Therapist I-III
University of Pittsburgh Medical Center
Pittsburgh, PA

Honors and Awards

Career

Catherine Worthingham Fellow of the American Physical Therapy Association

In recognition of notable contributions that have resulted in lasting and significant advances in the science, education, and practice of physical therapy.

June 2017 – NEXT Conference and Exposition, American Physical Therapy Association

Florida Physical Therapy Association Award for Scholarly Impact on Practice

Recognizes an individual for scholarly activity that has made a meaningful difference to clinical practice by physical therapists in Florida

September 2016 – Florida Physical Therapy Association Annual Meeting

Ulf Lindblom Young Investigator Award for Clinical Sciences

Honors independence as a scholar in the field of pain (clinical sciences)

August 2012 – World Congress on Pain, International Association for the Study of Pain

John C. Liebeskind Early Career Scholar Award

Recognition of exceptional accomplishment and promise in pain scholarship

May 2009 – Annual Scientific Meeting, American Pain Society

Eugene Michels New Investigator Award

Acknowledgment of an outstanding new investigator with commitment to a defined research theme

June 2007 – Annual Conference and Exposition, American Physical Therapy Association

Professional

21st John H.P. Maley Lecturer

Recognition of significant contribution to the physical therapy profession in the area of clinical practice

June 2016 – NEXT Conference and Exposition, American Physical Therapy Association

J. Brooks Brown Research Award

Recognition of outstanding dedication, passion, service, commitment, and excellence in clinical research

October 2013 – Brooks Rehabilitation Annual Research Day

Mary Lou Barnes Distinguished Professional Service Award

Significant contributions to physical therapy through excellence in teaching, research, or service

March 2012 - West Virginia University, Division of Physical Therapy

Jack Wessel Excellence Award for Assistant Professors

Recognition of outstanding accomplishments as an assistant professor

April 2009 – University of Florida

Publication

Jules M. Rothstein Golden Pen Award for Scientific Writing

Recognition of superior writing skills and a continuing record of scholarly contributions and collaborations to the benefit of *Physical Therapy* (PTJ)

June 2016 – NEXT Conference and Exposition, American Physical Therapy Association

JOSPT Excellence in Research Award

Best research article published in the *Journal of Orthopaedic & Sports Physical Therapy*

February 2010 – Orthopaedic and Sports Sections, APTA

“A randomized sham-controlled trial of a neurodynamic technique in the treatment of carpal tunnel syndrome”

Bialosky JE, Bishop MD, Price DD, Robinson ME, Vincent KR, **George SZ**

Jack Walker Award

Contribution to the understanding of clinical practice and patient care published in *Physical Therapy*

June 2003 - Chattanooga Corporation and APTA

“Identifying psychosocial variables in patients with acute, work-related low back pain: the importance of fear-avoidance beliefs”

Fritz JM and **George SZ**

Rose Excellence in Research Award

Recognition of research article with significant impact on orthopaedic physical therapy practice.

February 2003 - Orthopaedic Section, APTA

“The role of fear-avoidance beliefs in acute low back pain: relationships with current and future disability and work status”

Fritz JM, **George SZ**, Delitto A

Research

Military Health Systems Research Symposium Award

August 2015 – Outstanding Research Accomplishment/Team/Academic (Honorable Mention)

“Implications of early and guideline adherent physical therapy for low back pain on utilization and costs”

Childs JD, Fritz JM, Wu SS, Flynn TW, Wainner RS, Robertson EK, **George SZ**.

The Spine Journal Outstanding Paper Award (Runner-up in Value Category)

October 2012 – North American Spine Society Outstanding Paper Award Selection Committee

“Prevention of low back pain in the military (POLM) cluster randomized trial: effects of brief psychosocial education on total and low back pain related health care costs”

Childs JD, Wu SS, Teyhen DS, Robinson ME, **George SZ**.

Plenary Article

Editor selected paper of importance

2012 - *Neuroscience Letters*

“Dynamic, but not static, pain sensitivity predicts exercise-induced muscle pain: covariation of temporal sensory summation and pain intensity”

Bishop MD, **George SZ**, Robinson ME.

Excellence in Research Award

Highest scored research abstract submitted to sports section.

February 2011 - Sports Physical Therapy Section, APTA

“Fear of re-injury/low confidence 1 year after ACL reconstruction: high prevalence and altered self-ratings”

Lentz TA, Zeppieri Jr G, Moser MW, Indelicato P, **George SZ**, Chmielewski TL.

COL David G. Greathouse Excellence in Research Award

Outstanding student-faculty research project.

May 2008 - US Army-Baylor University Doctoral Program in Physical Therapy

“The effects of traditional sit-up training versus core stabilization exercises on sit-up performance on US Army Soldiers: A cluster randomized trial”

Childs JD, **George SZ**, Wright AC, Dugan JL, Benedict T, Fortenberry A, Bush J, Preston J, McQueen R, Teyhen DS

Excellence in Research Award

Highest scored research abstract submitted to sports section.

February 2008 - Sports Physical Therapy Section, APTA

“Identifying impairments that predict function: a preliminary step in developing return-to-play guideline for ACL reconstruction”

Lentz TA, Tillman SM, Moser MW, Indelicato PA, **George SZ**, Chmielewski TL

Other Academic Awards and Honors

Scholarships

PODS II (2001-2002)

Foundation for Physical Therapy (\$15,000)

PODS I (2000-2001)

Foundation for Physical Therapy (\$7,500)

Class Marshall

School of Health and Rehabilitation Studies

University of Pittsburgh, April 1998

Order of the Grail

Junior Honor Society

West Virginia University, December 1993

Outstanding Freshman Scholar Award

Phi Kappa Phi Honor Society

West Virginia University, December 1991

Grant Activity

Ongoing: Principal Investigator

Title: Biopsychosocial Influence on Shoulder Pain

Participation: Principal Investigator (40% Effort)

Type: R01 - 2AR055899

Agency: National Institutes of Health (NIAMS/NINDS)

Direct Costs: \$1,900,000 (renewal award)

Funding Period: 2008 – 2020

The goal of this project is to determine mechanisms and efficacy of personalized pharmaceutical and personalized psychological pain interventions designed to target the genetic and psychological factors that comprise a high risk subgroup experiencing exercise-induced shoulder pain.

Ongoing: Co-Investigator or Consultant

Title: Targeted Interventions to Prevent Chronic Low Back Pain in High Risk Patients:
A Multi-Site Pragmatic RCT (PI: Delitto A)

Participation: Co-Investigator (15% Effort)

Type: Large pragmatic clinical trial award
Agency: Patient Centered Outcomes Research Institute
Direct Costs: \$13,915,000
Funding Period: 2015 – 2020

This study is investigating whether psychologically informed interventions for acute low back pain can prevent transition to chronic low back pain for patients that are at high risk for disability.

Completed: Principal Investigator

Title: Orthopaedic Physical Therapy-Investigative Network (OPT-IN) for the Optimal Screening for Prediction of Referral and outcome (OSPRO) Cohort Study
Participation: Principal Investigator (18% Effort)
Agency: Orthopaedic Section of the American Physical Therapy Association
Direct Costs: \$300,000
Funding Period: 2013 – 2017

This grant created a clinical research network for physical therapists for completion of the OSPRO cohorts, including development and validation of screening tools for review of systems and yellow flags.

Title: Cervical and Shoulder Manipulative Therapy Effects on Pain Sensitivity
Participation: Mentor/Co-Principal Investigator with Rogelio Coronado
Agency: Orthopaedic Section of the American Physical Therapy Association
Direct Costs: \$15,000
Funding Period: 2012 – 2014

The purpose of this study is to examine whether extremity and spinal manipulative therapy have different effects on pain responses and clinical outcomes in patients with unilateral shoulder pain.

Title: Investigation of the STarT Back Screening Tool in Physical Therapy Settings
Participation: Principal Investigator (5% Effort)
Agency: Brooks Endowment
Direct Costs: \$40,000
Funding Period: 2010 – 2011

This study investigates the discriminant and predictive validity of the STarT back screening tool for identifying psychological distress and poor outcomes for conservative rehabilitation of low back pain.

Title: Prevention of Low Back Pain in the Military: A Randomized Clinical Trial
Participation: Principal Investigator of Award Site (30% Effort)
Type: PR054098
Agency: Department of Defense
Direct Costs: \$890,000
Funding Period: 2006 – 2011 (1 year no cost extension)

This cluster randomized clinical trial investigates the effect of a novel prevention program to limit the development of chronic low back pain in Soldiers.

Title: Mechanisms of Neural Mobilization for Chronic Pain
Participation: Principal Investigator (25% Effort)
Type: R21AT002796
Agency: National Institutes of Health (NCCAM)
Direct Costs: \$270,000
Funding Period: 2007 – 2009 (1 year no cost extension)

This study investigated whether patients with carpal tunnel syndrome demonstrate excessive central sensitization of pain and if a novel manipulative and body-based method (neural mobilization) reduces central sensitization of pain.

Title: Behavioral Interventions for Low Back Pain
Participation: Principal Investigator (25% Effort)
Type: R03AR051128
Agency: National Institutes of Health (NIAMS)
Direct Costs: \$150,000
Funding Period: 2005 – 2009 (1 year no cost extension)
This randomized trial compared the efficacy of two different behavioral interventions for reducing disability in patients with acute and sub-acute low back pain.

Title: Biopsychosocial Factors' Influence on Shoulder Pain
Participation: Principal Investigator (20% Effort)
Type: Research Opportunity Incentive Fund
Agency: University of Florida
Direct Costs: \$87,500
Funding Period: 2005 – 2006
This study investigated the contribution of specific genetic and psychological factors to the development of post-operative chronic shoulder pain.

Completed: Co-Investigator or Consultant

Title: Central Mechanisms of Body Based Intervention for Musculoskeletal Low Back Pain (PI: Bishop MD)
Participation: Co-Investigator (10% Effort)
Type: R01AT006334
Agency: National Institutes of Health (NCCAM)
Direct Costs: \$1,250,000
Funding Period: 2011 – 2016
This study investigated changes in brain activity occurring from transition of pain free to exercise induced low back pain, and in response to spinal manipulation.

Title: Implementing Psychologically Informed Practice Principles into Physical Therapy Management for Low Back Pain: Effects of Clinician Training & Comparison of Treatment Approaches (PI: Beneciuk J)
Participation: Co-Investigator
Direct Costs: \$40,000
Agency: Brooks Rehabilitation
Funding Period: 2012 – 2014
This study investigated if a psychologically informed practice training course influenced physical therapist attitudes and beliefs about psychosocial prognostic factors for LBP and whether these beliefs are associated with improved patient outcomes.

Title: Cognitive-Behavioral Based Physical Therapy: Improving Surgical Spine Outcomes (PI: Archer K)
Participation: Consultant
Type: R21AR062880
Agency: National Institutes of Health (NIAMS)
Direct Costs: \$224,655
Funding Period: 2012 – 2014
This study is investigating whether adding cognitive behavioral approaches to post surgical physical therapy improves patient related outcomes.

Title: Resistance Exercise Effects on Fear-Avoidance Beliefs and Physical Function in Obese, Older Adults with Chronic Low Back Pain (PI: Vincent HK)
Participation: Co-Investigator (3-4% Effort)
Type: R03AR057552
Agency: National Institutes of Health (NIAMS)
Direct Costs: \$150,000
Funding Period: 2010 – 2012
This study investigated the effects of resistance exercise on physical and psychosocial outcomes from older, obese adults with chronic low back pain.

Title: Pain Rehabilitation: Patient Centered Outcomes (PI: Robinson ME)
Participation: Co-Investigator (5% Effort)
Type: R01NS047119
Agency: National Institutes of Health (NINDS/NIMH)
Direct Costs: \$750,000
Funding Period: 2006 – 2009
This study investigated the reliability and validity of patient determined criteria for outcomes related to various pain rehabilitation interventions.

Title: The Effect of Plyometric Exercise Intensity on Function & Articular Cartilage Metabolism After ACL Reconstruction (PI: Chmielewski TL)
Participation: Co-investigator (1% Effort)
Type: Research Grant
Agency: National Football League Charities
Direct Costs: \$125,000
Funding Period: 2008 – 2010
This study investigated differences in plyometric exercise protocols on return to sport and cartilage degradation.

Publications

* - Post-doc or student author mentored by SZG
Underline – senior author

Peer-Review

1. Butera KA*, **George SZ**, Borsa PA, Dover GC. Prolonged reduction in shoulder strength after TENS treatment of exercise-induced acute muscle pain. *Pain Pract*, in press
2. Beneciuk JM, Lentz TA*, He Y, Wu SS, **George SZ**. Prediction of persistent musculoskeletal pain at 12 Months: a secondary analysis of the Optimal Screening for Prediction of Referral and Outcome (OSPRO) Validation Cohort study. *Phys Ther*, in press.
3. **George SZ**, Beneciuk JM, Lentz TA*, Wu SS, Dai Y, Bialosky JE, Zeppieri G. Optimal screening for prediction of referral and outcome (OSPRO) for musculoskeletal pain conditions: results from the validation cohort. *J Orthop Sports Phys Ther*, in press.
4. **George SZ** and Bishop MD. Chronic musculoskeletal pain is a nervous system disorder... now what? *Phys Ther*, in press.
5. Keefe FJ, Main CJ, **George SZ**. Advancing psychologically informed practice (PiP) for patients with persistent musculoskeletal pain: promise, pitfalls, and solutions. *Phys Ther*, in press.

6. Cook CE, **George SZ**, Reiman MP. Red flag screening for low back pain; nothing to see here, move along: a narrative review. *Br J Sports Med*, in press.
7. Horn ME, **George SZ**, Fritz JM. Influence of initial provider on healthcare utilization in patients seeking care for neck pain. *Mayo Clinic Proceedings: Innovations, Quality & Outcomes*, in press.
8. Bialosky JE, Beneciuk JM, Bishop MD, Coronado RA, Pence CW, Simon CB, **George SZ**. Unraveling the mechanisms of manual therapy: a modeling approach. *J Orthop Sports Phys Ther*, 2018;48(1):8-18.
9. Cook CE, O'Connell NE, Hall T, George SZ, Jull G, Wright AA, Girbes EL, Lewis J, Hancock M. Benefits and threats to using social media for presenting and implementing evidence. *J Orthop Sports Phys Ther*, 2018;48(1):3-7.
10. Hedderson WC, Dover GC, **George SZ**, Crow JA, Borsa PA. Expectancy reduces symptoms but not functional impairment following exercise induced musculoskeletal injury. *Clin J Pain*, 2018;34(1):1-7.
11. Bishop MD and **George SZ**. Pain sensitivity and torque used during measurement predicts change in range of motion at the knee. *J Pain Research*, 2017;10:2711-2716.
12. Boissoneault J, Mundt J, Robinson M, **George SZ**. Predicting low back pain outcomes: suggestions for future directions. *J Orthop Sports Phys Ther*, 2017;47(9):588-592
13. Gay CW, Horn ME, **George SZ**, Bishop MD. Comparison of two lumbar manual therapies on temporal summation of pain in healthy volunteers. *J Pain*, 18(11):1397-1408.
14. **George SZ**, Beneciuk JM, Lentz TA, Wu SS. Cohort profile: Optimal Screening for Prediction of Referral and Outcome (OSPRO) in Patients with Musculoskeletal Pain Conditions. A Longitudinal Validation Cohort from the United States. *BMJ Open*, 2017; 8(7):6.
15. **George SZ**, Staud R, Borsa PA, Wu SS, Wallace MR, Greenfield, III WH, Mackie LN, Fillingim RB. Biopsychosocial influence on shoulder pain: rationale and protocol for a pre-clinical trial. *Contemp Clin Trials*, 2017;56:9-17.
16. Cook CE, Rhon DI, Lewis BD, **George SZ**. Post-operative opioid pain management patterns for patients who receive hip surgery. *Subst Abuse Treat Prev Policy*, 2017; 12(1):14.
17. Zeppieri G and **George SZ**. Longitudinal assessment of patient desired, expected, and successful outcome criterion in outpatient physical therapy. *Health Qual Life Outcomes*, 2017; 15(1):29.
18. Orr LC, **George SZ**, Simon CB. Association between physical activity and pain processing in adults with chronic low back pain compared to pain-free controls. *J Back Musculoskelet Rehab*, 2017;30(3):575-581.
19. Rhon D, Lentz TA*, **George SZ**. Unique contributions of body diagram scores and psychosocial factors to pain intensity and disability in patients with musculoskeletal pain in a military primary care clinic. *J Orthop Sports Phys Ther*, 2017; 47(2):88-96.
20. Hsu CJ, **George SZ**, Chmielewski TL. Association of quadriceps strength and psychosocial factors with single leg hop performance in patients with meniscectomy. *Orthop J Sports Med*, in press.

21. Lentz TA*, Harman JS, Marlow NM, **George SZ**. Development of a value model for the prevention and management of chronic pain by physical therapists. *Phys Ther*, 97(3):354-364.
22. Hsu CJ, Meierbachtol AS, **George SZ**, Chmielewski TL. Fear of re-injury in athletes: implications for rehabilitation. *Sports Health*, in press.
23. Fabricio JJ, Del Antonio T, Moraes R, **George SZ**, Chaves TC. Effects of functional taping compared to sham and minimal intervention on pain intensity and postural control for patients with nonspecific chronic low back pain: a randomized trial protocol. *Physiotherapy*, in press.
24. Beneciuk JM, Hill JC, Campbell P, Afolabi E, **George SZ**, Dunn KM, Foster NE. Identifying treatment effect modifiers in the STarT Back Trial: A secondary analysis. *J Pain*, 2017; 18(1): 54-65.
25. Coronado RA*, Simon CB, Lentz TA*, Gay CW, Mackie LN, **George SZ**. Optimism moderates the influence of pain catastrophizing on shoulder pain outcome: a longitudinal analysis. *J Orthop Sports Phys Ther*, 2017; 47(1): 21-30.
26. Sorensen CJ, **George SZ**, Callaghan JP, Van Dillen LR. Psychological factors are related to pain intensity in back-healthy people who develop clinically relevant pain during prolonged standing: A preliminary study. *PM&R*, 2016; 8(11): 1031-1038.
27. Horn ME, Brennan GP, **George SZ**, Harman JS, Peoples-Shep M, Bishop MD. Clinical outcomes, utilization and charges in persons with neck pain receiving guideline adherent physical therapy. *Eval Health Prof*, 2016; 39(4): 421-434.
28. **George SZ**, Wu SS, Wallace MR, Moser MW, Wright TW, Farmer KW, Greenfield III W, Dai Y, Li H, Fillingim RB. Biopsychosocial influence on shoulder pain: genetic and psychological combinations are predictive of 12 month post-operative pain and disability outcomes. *Arthritis Care Res*, 2016;68(11):1671-1680.
29. Butera KA*, Fox EJ, **George SZ**. Towards a transformed understanding: from pain and movement to pain *with* movement. *Phys Ther*, 2016;96(10):1503-1507.
30. Larkin-Kaiser KA, Borsa PA, Baweja HS, Moore MA, Tillman MD, **George SZ**, Christou EA. Photobiomodulation delays the onset of skeletal muscle fatigue in a dose-dependent manner. *Lasers Med Sci*. 2016;31(7):1325-1332.
31. Springer KS, **George SZ**, Robinson ME. The development of a technologically-based hierarchy to assess chronic low back pain and pain-related anxiety from a fear-avoidance model. *J Pain*, 2016; 17(8):904-910.
32. Valencia C*, Coronada RA, Simon CB, Wright TW, Moser MW, Farmer KW, **George SZ**. Pre-surgical physical therapy treatment did not influence post-operative pain and disability outcomes in patients undergoing shoulder arthroscopy: a prospective study. *J Pain Research*, 2016;9: 493-502.
33. Horn ME, Brennan GP, **George SZ**, Harman JS, Bishop MD. A value proposition for early physical therapist management of neck pain: A retrospective cohort analysis. *BMC Health Serv Res*, 2016; 16:253.
34. Lentz TA*, Beneciuk JM, Bialosky JE, Zeppieri G, Dai Y, Wu SS, **George SZ**. Development of a yellow flag assessment tool for orthopaedic physical therapists: results from the optimal screening for prediction of referral and outcome (OSPRO) cohort. *J Orthop Sports Phys Ther*, 2016;46(5):327-43.

35. Butera KA*, Lentz TA, Beneciuk JM, **George SZ**. Preliminary evaluation of a modified STarT Back Screening Tool across different musculoskeletal pain conditions. *Phys Ther*, 2016;96(8):1251-61.
36. Simon CB*, Riley III JL, Fillingim RB, Bishop MD, **George SZ**. Comparative associations of working memory and pain catastrophizing with chronic low back pain intensity. *Phys Ther*, 2016;96(7):1049-1056.
37. Archer KR, Devin CJ, Vanston SW, Koyama T, Phillips S, **George SZ**, McGirt ML, Spengler DM, Aaronson OS, Cheng JS, Wegener ST. Cognitive-behavioral based physical therapy improves pain, disability, general health, and physical performance following spine surgery: a randomized clinical trial. *J Pain*, 2016;17(1):76-89.
38. Chmielewski TL, **George SZ**, Tillman SM, Moser MW, Lentz TA, Indelicato PA, Shuster J, Trumble TN, Leeuwenburgh C, Cicuttini FM. Low vs. high intensity plyometric exercise in anterior cruciate ligament reconstruction rehabilitation. *Am J Sports Med*, 2016;44(3):609-617.
39. Simon CB, Riley III JL, Coronado RA, Valencia C, Wright TW, Moser MW, Farmer KW, **George SZ**. Older age as a prognostic factor of attenuated pain recovery after shoulder arthroscopy. *PM&R*, 2016;8(4):297-304.
40. Simon CB*, Coronado RA, Valencia C, Greenfield III W, Wright TW, Moser MW, Farmer KW, **George SZ**. Predicting pain and disability after shoulder arthroscopy: rotator cuff severity and concomitant arthroscopic procedures. *Clin J Pain*, 2016; 32(5):404-410.
41. Simon CB*, Riley III JL, Fillingim RB, Bishop MD, **George SZ**. Age group comparisons of TENS response among individuals with chronic axial low back pain. *J Pain*, 2015;16(12):1268-1279.
42. Childs JD, Wu SS, Andrade RL, Bonner VE, Bowman JA, Butler AM, Teyhen DS, **George SZ**. Incremental effects of using a telephone call center and health care utilization database to enhance web-based follow-up rate in the Prevention of Low Back Pain in the Military trial. *US Army Med Dep J*, 2015;10-12:22-28.
43. Wander LD, Torres CA, Bartley EJ, **George SZ**, Robinson ME. Effect of a perspective-taking intervention on the consideration of pain assessment and treatment decisions. *J Pain Res*, 2015;11;8:809-818.
44. Coronado RA, **George SZ**, Devin CJ, Wegener ST, Archer KR. Pain sensitivity and pain catastrophizing are associated with persistent pain and disability after lumbar spine surgery. *Arch Phys Med Rehabil*, 2015;96(10):1763-1770.
45. Horn ME, Brennan GP, **George SZ**, Harman JS, Bishop MD. Description of common clinical presentations and associated short term physical therapy clinical outcomes and utilization in patients with neck pain. *Arch Phys Med Rehabil*, 2015;96(10):1756-1762.
46. Bohne C, **George SZ**, Zeppieri G. Knowledge of injury prevention and prevalence of risk factors for throwing injuries in a sample of youth baseball players. *Int J Sports Phys Ther*, 2015;10(4): 464-475.
47. Beneciuk JM and **George SZ**. Pragmatic implementation of a stratified primary care model for low back pain management in outpatient physical therapy settings: a two-phased, sequential pilot study. *Phys Ther*, 2015;95(8):1120-1134.

48. Gewandter JS, Dworkin RH, Turk DC, Farrar JT, Fillingim RB, Gilron I, Markman JD, Oaklander AL, Polydefkis MJ, Raja SN, Robinson JP, Woolf CJ, Ziegler D, Ashburn MA, Burke LB, Cowan P, **George SZ**, Goli V, Graff OX, Iyengar S, Jay GW, Katz J, Kehlet H, Kitt RA, Kopecky EA, Malamut R, McDermott MP, Palmer P, Rappaport BA, Rauschkolb C, Steigerwald I, Tobias J, Walco GA. Research design considerations for chronic pain prevention clinical trials: IMMPACT recommendations. *Pain*, 156(7):1184-97.
49. **George SZ**, Beneciuk JM, Bialosky JE, Lentz TA, Zeppieri G, Pei Q, Wu SS. Development of a systems review tool for orthopaedic physical therapists: results from the Optimal Screening for Prediction and Referral and Outcome (OSPRO) cohort. *J Orthop Sports Phys Ther*, 2015;45(7):512-26.
50. Sorensen CJ, Johnson MB, Callaghan JP, **George SZ**, Van Dillen LR. Validity of a paradigm for low back pain symptom development during prolonged standing. *Clin J Pain*, 2015;31(7):652-659.
51. Childs JD, Fritz JM, Wu SS, Flynn TW, Wainner RS, Robertson EK, **George SZ**. Implications of early and guideline adherent physical therapy for low back pain on utilization and costs. *BMC Health Serv Res*, 2015;15:150.
52. Coronado RA*, Bialosky JE, Bishop MD, Riley III JL, Robinson ME, Michener LA, **George SZ**. The comparative effects of spinal and peripheral thrust manipulation and exercise on pain sensitivity and the relation to clinical outcome: a mechanistic trial using a shoulder pain model. *J Orthop Sports Phys Ther*, 2015;45(4):252-264.
53. Alappattu MJ*, Coronado RA*, Lee D*, Bour B, **George SZ**. Clinical characteristics of patients with cancer referred to outpatient physical therapy. *Phys Ther*, 2015; 95(4): 526-538.
54. Kaiser KL, Parr JJ*, Borsa PA, **George SZ**. Range of motion predicts clinical shoulder pain during recovery from delayed onset muscle soreness. *J Athl Train*, 2015;50(3): 289-294.
55. Alappattu MA, **George SZ**, Robinson ME, Fillingim RB, Moawad N, LeBrun Emily, Bishop MD. Painful intercourse is significantly associated with evoked pain perception and cognitive aspects of pain in women with pelvic pain. *Sex Med*, 2015;3(1):14-23.
56. **George SZ** and Beneciuk JM*. Psychological predictors of recovery from low back pain: a prospective study. *BMC Musculoskelet Disord*, 2015;16:49.
57. Lentz TA, Zeppieri G, **George SZ**, Tillman SM, Moser MW, Farmer KW, Chielewski TL. Comparison of physical impairment, functional and psychosocial measures based on fear of re-injury/lack of confidence and return to sport status following ACL reconstruction. *Am J Sports Med*, 2015;43(2):345-353.
58. **George SZ**, Wallace MR, Wu SS, Moser MW, Wright TW, Farmer KW, Borsa PA, Parr JJ, Greenfield III W, Dai Y, Li H, Fillingim RB. Biopsychosocial influence on shoulder pain: risk subgroups translated across preclinical and clinical prospective cohorts. *Pain*, 2015;156(1): 148-156.
59. Kaiser KL, Christou E, Tillman M, **George S**, Borsa P. Near-infrared light therapy attenuates strength loss following strenuous resistance exercise. *J Athl Train*, 2015;50(1): 45-50.
60. Beneciuk JM*, Robinson ME, **George SZ**. Subgrouping for patients with low back pain: a multidimensional approach incorporating cluster analysis and the STarT Back Screening Tool. *J Pain*, 2015;16(1): 19-30.

61. Childs JD, Harman JS, Rodeghero JR, Horn M, **George SZ**. Implications of practice setting on clinical outcomes and efficiency of care in the delivery of physical therapy services. *J Orthop Sports Phys Ther*, 2014;44(12): 955-963.
62. Gay CW, Robinson ME, Perlstein MW, **George SZ**, Bishop MD. Functional connectivity changes following manual therapy. *J Manipulative Physiol Ther*, 2014;37(9):614-627.
63. Simon CB*, Coronado RA, Wurtzel WA, Riddle DL, **George SZ**. Content and bibliometric analyses of the Journal of Manual and Manipulative Therapy. *J Man Manip Ther*, 2014;22(4): 181-190.
64. Coronado RA*, Simon CB*, Valencia C, Parr JJ, Borsa PA, **George SZ**. Suprathreshold heat pain response predicts activity-related pain, but not rest-related pain, in an exercise-induced injury model. *PLoS One*, 2014;29(9):e108699.
65. **George SZ**, Parr JJ, Wallace MR, Wu SS, Borsa PA, Dai Y, Fillingim RB. Inflammatory genes and psychological factors predict induced shoulder pain phenotype. *Med Sci Sports Exerc*, 2014;46(10):1871-1881.
66. Taylor JB, Goode AP, **George SZ**, Cook C. Incidence and risk factors for first time incident low back pain: a systematic review and meta-analysis. *Spine J*, 2014;14(10):2299-2319.
67. Beneciuk JM*, Fritz JM, **George SZ**. The STarT back screening tool for prediction of six month clinical outcomes: relevance of change patterns in outpatient physical therapy settings. *J Orthop Sports Phys Ther*, 2014;44(9)656-664.
68. Vincent HK, **George SZ**, Seay AN, Vincent KR, Hurley RW. Resistance exercise, disability, and pain catastrophizing in obese adults with back pain. *Med Sci Sports Exerc*, 2014;46(9):1693-1701.
69. Valencia C*, Fillingim RB, Bishop MD, Wu SS, Wright TW, Moser MW, Farmer KT, **George SZ**. Investigation of central pain processing in post-operative shoulder pain and disability. *Clin J Pain*, 2014;30(9):775-786.
70. Coronado RA*, Bialosky JE, Robinson ME, **George SZ**. Pain sensitivity subgroups in individuals with spine pain: potential relevance to short-term clinical outcome. *Phys Ther*, 2014;94(8):1111-1122.
71. Hanney WJ, **George SZ**, Kolber MJ, Young I, Salamh PA, Cleland JA. Inter-rater reliability of select physical examination procedures in patients with neck pain. *Physiother Theor Pract*, 2014;30(5):345-352.
72. Wandner LD, Heft MW, Lok BC, Hirsh AT, **George SZ**, Horgas AL, Atchison JW, Torres CA, Robinson ME. The impact of patients' gender, race, and age on health care professionals' pain management decisions: an online survey using virtual human technology. *Int J Nurs Stud*, 2014;51(5):726-733.
73. Nisenzon AN, **George SZ**, Beneciuk JM, Wandner LD, Torres CA, Robinson ME. The role of anger in psychosocial subgrouping for patients with low back pain. *Clin J Pain*, 2014;30(6):501-509.
74. Vincent HK, Vincent KR, Seay AN, Conrad BP, Hurley RW, **George SZ**. Back strength predicts walking improvement in obese, older adults with chronic low back pain. *PM&R*, 2014;6(5): 418-426.

75. Childs JD, Wu SS, Teyhen DS, Robinson ME, **George SZ**. Prevention of low back pain in the military (POLM) cluster randomized trial: effects of brief psychosocial education on total and low back pain related health care costs. *Spine J*, 2014;14(4):571-583.
76. Parr J*, Borsa P, Fillingim R, Larkin K, Tillman MD, Manini TM, Gregory C, **George S**. Psychological influences predict recovery following exercise induced shoulder pain. *Int J Sports Med*, 2014;35(3):232-237.
77. Kittelson A, **George SZ**, Maluf K, Stevens-Lapsley J. Future directions in painful knee osteoarthritis: harnessing complexity in a heterogeneous population. *Phys Ther*, 2014;94(3):422-32.
78. Bialosky JE, **George SZ**, Horn ME, Price DD, Staud R, Robinson ME. Spinal manipulative therapy specific changes in pain sensitivity in individuals with low back pain. *J Pain*, 2014;15(2): 136-148.
79. Coronado RA*, Simon CB*, Valencia C*, **George SZ**. Experimental pain responses support peripheral and central sensitization in patients with unilateral shoulder pain. *Clin J Pain*, 2014;30(2):143-151.
80. **George SZ**, Parr JJ, Wallace MR, Wu SS, Borsa PA, Dai Y, Fillingim RB. Biopsychosocial influence on exercise-induced injury: genetic and psychological combinations are predictive of shoulder pain phenotypes. *J Pain*, 2014; 15(1):68-80.
81. Harrington S*, Michener LA, Kendig T, Miale S, **George SZ**. Patient-rated upper-extremity outcome measures utilized in breast cancer survivors: a systematic review. *Arch Phys Med Rehabil*, 2014; 95(1): 153-162.
82. Hanney WJ, Kolber MJ, **George SZ**, Young I, Patel CK, Cleland JA. Development of a preliminary clinical prediction rule to identify patients with neck pain that may benefit from a standardized program of stretching and muscle performance exercise: a prospective cohort study. *Int J Sports Phys Ther*, 2013; 8(6): 756-776.
83. Simon CB*, Stryker SE, **George SZ**. Patient outcomes in outpatient orthopaedic manual physical therapy: examining the influence of therapist and patient prognostic factors. *J Man Manip Ther*, 2013;21(4): 187-195.
84. Wandner LD, Torres CA, Lok BC, Joon CH, **George SZ**, and Robinson ME. Pain assessment and treatment decisions for virtual human patients. *Cyberpsychol Behav Soc Netw*, 2013; 16(12): 904-909.
85. Teyhen DS, Childs JD, Dugan JL, Wright AC, Sorge JA, Mello J, Mamolejo M, Taylor A, Wu SS, **George SZ**. The effect of two different trunk strengthening exercise regimens on trunk muscle morphometry and endurance in Soldiers in training. *Phys Ther*, 2013; 93(9):1211-1224.
86. Valencia C*, Kindler LL, Fillingim RB, **George SZ**. Stability of conditioned pain modulation in two musculoskeletal pain models. *BMC Musculoskelet Disord*, 2013; 14(1):182.
87. Beneciuk JM*, Bishop MD, Fritz JM, Robison ME, Asal NR, Nisenzon AN, **George SZ**. The STarT back screening tool and individual psychological measures: evaluation of prognostic capabilities for low back pain clinical outcomes in outpatient physical therapy settings. *Phys Ther*, 2013; 93(3):321-33.
88. Anderson RJ, Craggs JG, Bialosky JE, Bishop MD, **George SZ**, Staud R, Robinson ME. Temporal summation of second pain: variability in responses to a fixed protocol. *Eur J Pain*, 2013;17(1):67-74.

89. Lentz TA, Tillman SM, Indelicato PA, Moser MW, **George SZ**, Chmielewski TL. Return to pre-injury sports participation following ACL reconstruction: contributions of demographic, knee impairment, and self-report measures. *J Orthop Sports Phys Ther*, 2012;42(11):893-901.
90. Bishop MD, **George SZ**, Robinson ME. Dynamic, but not static, pain sensitivity predicts exercise-induced muscle pain: covariation of temporal sensory summation and pain intensity. *Neurosci Lett*, 2012;526(1):1-4.
91. Sharma NK, Brooks WM, Popescu AE, Vandillen L, **George SZ**, McCarson KE, Gajewski BJ, Gorman P, Cirstea CM. Neurochemical analysis of primary motor cortex in chronic low back pain. *Brain Sciences*, 2012; 1;2(3):319-331.
92. Prugh J*, Zeppieri G, **George SZ**. Impact of psychosocial factors, pain, and functional limitations on throwing athletes who return to sport following elbow injuries: a case series. *Physiother Theor Pract*, 2012;28(8):633-40.
93. Bialosky JE, Simon CB, Bishop MD, **George SZ**. Basis for spinal manipulative therapy: a physical therapist perspective. *J Electromyogr Kinesiol*, 2012;22(5):643-647.
94. Coronado RA*, Gay CW, Bialosky JE, Carnaby(Mann) GD, Bishop MD, **George SZ**. Changes in pain sensitivity following spinal manipulation: a systematic review and meta-analysis. *J Electromyogr Kinesiol*, 2012;22(5): 15-22.
95. Beneciuk JM*, Robinson ME, **George SZ**. Low back pain subgroups using fear-avoidance model measures: results of a cluster analysis. *Clin J Pain*, 2012;28(8): 658-666.
96. Teyhen DS, Childs JD, Stokes MJ, Wright AC, Dugan JL, **George SZ**. Abdominal and lumbar multifidus muscle size and symmetry at rest and during contracted states: normative reference ranges. *J Ultras Med*, 2012; 31(7): 1099-1110.
97. Parr JJ*, Borsa PA, Fillingim RB, Tillman MD, Manini TM, Gregory CM, **George SZ**. Pain related fear and catastrophizing predict pain intensity and disability independently using an induced muscle injury model. *J Pain*, 2012; 13(4): 370-378.
98. Delitto A, **George SZ**, Van Dillen L, Whitman JM, Sowa G, Shekelle P, Denninger TR, Godges JJ. Low back pain. Clinical practice guidelines linked to the International Classification of Functioning, Disability, and Health from the Orthopaedic Section of the American Physical Therapy Association. *J Orthop Sports Phys Ther*, 2012; 42(4): A1-A57.
99. Zeppieri G, Lentz TA, Atchison JW, Indelicato PA, Moser MW, Vincent KR, **George SZ**. Preliminary results of patient-defined success criteria for individuals with musculoskeletal pain in outpatient physical therapy settings. *Arch Phys Med Rehabil*, 2012;93(3): 434-440.
100. **George SZ**, Childs JD, Teyhen DS, Wu SS, Wright AC, Dugan JL, Robinson ME. Predictors of occurrence and severity of first time low back pain episodes: findings from a military inception cohort. *PLoS One*, 2012; 7(2): e30597.
101. Sanderson KB, Roditi D, **George SZ**, Atchison JW, Banou E, Robinson ME. Investigating patient expectations and treatment outcome in a chronic low back pain population. *J Pain Res*, 2012; 5: 15-22.

102. Hart DL, Werneke MW, **George SZ**, Deutscher D. Single item screens identified patients with elevated levels of depressive and somatization symptoms in outpatient physical therapy. *Qual Life Res*, 2012; 21(2): 257-268.
103. **George SZ**, Lentz TA, Zeppieri G, Lee D, Chmielewski TL. Analysis of shortened versions of the Tampa Scale for Kinesiophobia and Pain Catastrophizing Scale for patients following anterior cruciate ligament reconstruction. *Clin J Pain*, 2012; 28(1): 73-80.
104. Valencia C*, Kindler LK, Fillingim RB, **George SZ**. Investigation of central pain processing in shoulder pain: converging results from two musculoskeletal pain models. *J Pain*, 2012; 13(1): 81-89.
105. Bishop MD, Horn ME, Lott DJ, Arpan I, **George SZ**. Magnitude of spinal muscle damage is not statistically associated with exercise-induced low back pain intensity. *Spine J*, 2011; 11(12): 1135-1142.
106. Werneke MW, Hart DL, **George SZ**, Deutscher D, Stratford PW. Change in psychosocial distress associated with pain and functional status outcomes in patients with lumbar impairments referred to physical therapy services. *J Orthop Sports Phys Ther*, 2011; 41(12): 969-980.
107. Coronado RC*, Wurtzel WA, Simon CB, Riddle DL, **George SZ**. Bibliometric analysis of articles published from 1980 to 2009 in the Journal of Orthopaedic & Sports Physical Therapy. *J Orthop Sports Phys Ther*, 2011; 41 (12): 920-931.
108. Hart DL, Werneke MW, **George SZ**, Deutscher D, Stratford PW. Using intake and change in multiple psychosocial measures to predict functional status outcomes in people with lumbar spine impairments: a preliminary analysis. *Phys Ther*, 2011;91(12): 1812-1825.
109. **George SZ**, Childs JD, Teyhen DS, Wu SS, Wright AC, Dugan JL, Robinson ME. Brief psychosocial education, not core stabilization, reduced health care utilization for low back pain: results from the Prevention of Low Back Pain in the Military (POLM) cluster randomized trial. *BMC Med*, 2011;9:128.
110. Bialosky JE, Bishop MD, Price DD, Robinson ME, **George SZ**. Heightened pain sensitivity in individuals with signs and symptoms of carpal tunnel syndrome and its relationship to clinical outcomes following a manual therapy intervention. *Man Ther*, 2011;16(6): 602-608.
111. Chmielewski TL, Zeppieri G, Lentz TA, Tillman SM, Moser MW, Indelicato PA, **George SZ**. Longitudinal changes in psychosocial factors and their association with knee pain and function after ACL reconstruction. *Phys Ther*, 2011;91(9):1355-1366.
112. Coronado RA*, Alappattu MJ*, Hart DL, **George SZ**. Total number and severity of comorbidities do not differ based on anatomical location of musculoskeletal pain. *J Orthop Sports Phys Ther*, 2011;41(7):477-485.
113. Bishop MD, Beneciuk JM*, **George SZ**. Immediate reduction in temporal sensory summation after thoracic spine manipulation. *Spine J*, 2011;11(5):440-446.
114. Childs JD, Teyhen DS, Van Wyngaarden JJ, Dougherty BF, Ladislav BJ, Helton GL, Robinson ME, Wu SS, **George SZ**. Predictors of web-based follow-up response in the Prevention of Low Back Pain in the Military Trial. *BMC Musculoskelet Disord*, 2011;12:132.

115. Bishop MD, Horn ME, **George SZ**. Exercise-induced pain intensity predicted by pre-exercise fear of pain and pain sensitivity. *Clin J Pain*, 2011;27(5):398-404.
116. Simon CB*, Stryker SE, **George SZ**. Comparison of work-related fear-avoidance across different anatomical locations with musculoskeletal pain. *J Pain Res*, 2011;4:253-262.
117. Alappattu MJ, Bishop MD, Bialosky, **George SZ**, Robinson ME. Stability of behavioral estimates of activity-dependent modulation of pain. *J Pain Res*, 2011;4: 151-157.
118. Hart DL, Werneke MW, Deutscher D, **George SZ**, Stratford PW. Effect of fear-avoidance beliefs of physical activities on a model that predicts risk-adjusted functional status outcomes in patients treated for a lumbar spine dysfunction. *J Orthop Sports Phys Ther*, 2011;41(5):336-345.
119. Main CJ and **George SZ**. Psychologically informed practice for management of low back pain: future directions in practice and research. *Phys Ther*, 2011;91(5):820-824.
120. Fritz JM, Beneciuk JM*, **George SZ**. The relationship between categorization and the STarT back screening tool and prognosis for patients with low back pain receiving physical therapy. *Phys Ther*, 2011;91(5):722-732.
121. Nicholas MK and **George SZ**. Psychologically informed interventions for low back pain: an update for physical therapists. *Phys Ther*, 2011;91(5):765-776.
122. Coronado RA*, Riddle DL, Wurtzel WA*, **George SZ**. Bibliometric analysis of articles published from 1980 to 2009 in *Physical Therapy*, Journal of the American Physical Therapy Association. *Phys Ther*, 2011;91(5):642-655.
123. **George SZ** and Stryker SE. Fear-avoidance beliefs and clinical outcomes across multiple anatomical locations for patients seeking outpatient physical therapy for musculoskeletal pain. *J Orthop Sports Phys Ther*, 2011;41(4): 249-259.
124. Teyhen DS, **George SZ**, Dugan JL, Williamson JN, Neilson BD, Childs JD. Inter-rater reliability of ultrasound imaging of the trunk musculature among novice raters. *J Ultras Med*, 2011;30(3):347-356.
125. Coronado RA*, Kindler LL*, Valencia C*, **George SZ**. Thermal and pressure pain sensitivity in patients with unilateral shoulder pain: comparison of involved and uninvolved sides. *J Orthop Sports Phys Ther*, 2011;41(3):165-173.
126. **George SZ**, Coronado RA, Beneciuk JM, Valencia C, Werneke MW, Hart DL. Depressive symptoms, anatomical region, and clinical outcomes for patients seeking outpatient physical therapy for musculoskeletal pain. *Phys Ther*, 2011;91(3): 358-372.
127. Bishop MD, Horn ME, **George SZ**, Robinson ME. Self-reported pain and disability outcomes from an endogenous model of muscular back pain. *BMC Musculoskelet Disord*, 2011;12:35.
128. Bialosky JE, Bishop MD, **George SZ**, Robinson ME. Placebo response to manual therapy: Something out of nothing? *J Man Manip Ther*, 2011; 19(1):11-19.
129. **George SZ**, Calley D*, Valencia C*, Beneciuk JM*. Clinical investigation of pain related fear and pain catastrophizing for patients with low back pain. *Clin J Pain*, 2011;27(2):108-115.

130. Valencia C*, Robinson ME, **George SZ**. Socioeconomic status influences the relationship among fear-avoidance beliefs and disability. *Pain Med*, 2011;12(2):328-336.
131. Kindler LL*, Valencia C*, Fillingim RB, **George SZ**. Sex differences in experimental and clinical pain sensitivity for patients with shoulder pain. *Eur J Pain*, 2011;12(2):118-123.
132. Valencia C*, Fillingim RB, **George SZ**. Suprathreshold heat response is associated with clinical pain intensity for patients with shoulder pain. *J Pain*, 2011;12(1):133-140.
133. Vincent HK, Omlil MR, Day T, Hodges M, Vincent KR, **George SZ**. Fear of movement, quality of life, and self-reported disability in obese patients with chronic lumbar pain. *Pain Med*, 2011;12(1):154-164.
134. Calley D*, Jackson S, Collins H, **George SZ**. Identifying patient fear-avoidance beliefs by physical therapists managing patients with low back pain. *J Orthop Sports Phys Ther*, 2010;40(12):774-783.
135. Stutts LA, Hirsh AT, **George SZ**, Robinson ME. Investigating patient characteristics on pain assessment using virtual human technology. *Eur J Pain*, 2010;14(10):1040-1045.
136. **George SZ** and Robinson ME. Preference, expectation, and satisfaction in a clinical trial of behavioral interventions for acute and sub-acute low back pain (NCT00373867). *J Pain*, 2010;11(11):1074-1082.
137. Childs JD, Teyhen DS, Casey PR, McCoy-Singh KA, Feldtmann AW, Wright AC, Dugan JL, Wu SS, **George SZ**. Effects of traditional sit-up training versus core stabilization exercises on short-term musculoskeletal injury rates in US Army Soldiers: A randomized clinical trial. *Phys Ther*, 2010;90(10):1404-1412.
138. **George SZ**, Wittmer VT, Fillingim RB, Robinson ME. Comparison of graded exercise and graded exposure clinical outcomes for patients with chronic low back pain. *J Orthop Sports Phys Ther*, 2010;40(11):694-704.
139. Vincent HK, Lamb KM, Day TI, Tillman SM, Vincent KR, **George SZ**. Morbid obesity is associated with fear of movement and lower quality of life in patients with knee pain-related diagnoses. *PM&R*, 2010;2(8):713-722.
140. Mintken PE, Cleland JA, Whitman JM, **George SZ**. Psychometric properties of the Fear-Avoidance Beliefs Questionnaire and Tampa Scale of Kinesiophobia in patients with shoulder pain. *Archives Phys Med Rehabil*, 2010;91(7):1128-1136.
141. Beneciuk JM*, Bishop MD, **George SZ**. Pain catastrophizing predicts pain intensity during a neurodynamic test for the median nerve in health participants. *Man Ther*, 2010;15(4):370-375.
142. **George SZ**, Valencia CV*, Beneciuk JM*. A psychometric investigation of fear-avoidance model measures in patients with chronic low back pain. *J Orthop Sports Phys Ther*, 2010;40(4):197-205.
143. Robinson ME, Bialosky JE*, Bishop MD, Price DD, **George SZ**. Supra-threshold scaling, temporal summation, and after-sensation: relationships to each other and anxiety/fear. *J Pain Res*, 2010;3:25-32.

144. Bialosky JE*, Bishop MD, Robinson ME, **George SZ**. The relationship of the audible pop to hypoalgesia associated with high velocity, low amplitude thrust manipulation. A secondary analysis of an experimental study in pain free participants. *J Manipulative Physiol Ther*, 2010;33(2):117-124.
145. Bishop MD, Craggs JG, Horn ME, **George SZ**, Robinson ME. Relationship of intersession variation in negative pain-related affect and responses to thermally evoked pain. *J Pain*, 2010;11(2):172-8.
146. Childs JD, Teyhen DS, Benedict TM, Morris JB, Fortenberry AD, McQueen RM, Preston JB, Wright AC, Dugan JL, **George SZ**. Effects of sit-up training versus core stabilization exercises on sit-up performance. *Med Sci Sports Exerc*, 2009;41(11):2072-2083.
147. Bialosky JE*, Bishop MD, Zeppieri G, **George SZ**. Spinal manipulative therapy has an immediate effect on thermal pain sensitivity in people with low back pain: a randomized controlled trial. *Phys Ther*, 2009;89(12):1292-1303.
148. Bialosky JE*, Bishop MD, Price DD, Robinson ME, Vincent KR, **George SZ**. A randomized sham controlled trial of a neurodynamic technique in the treatment of carpal tunnel syndrome (NCT00929123). *J Orthop Sports Phys Ther*, 2009;39(10):709-723.
149. **George SZ**, Valencia C*, Zeppieri G, Robinson ME. Development of a self report measure of fearful activities for patient with low back pain – the Fear of Daily Activities Questionnaire (FDAQ). *Phys Ther*, 2009;89(9):969-979.
150. Bialosky JE*, Bishop MD, Price DD, Robinson ME, **George SZ**. The mechanisms of manual therapy in the treatment of musculoskeletal pain: a proposed comprehensive model. *Man Ther*, 2009;14:531-538.
151. Hart DL, Werneke MW, **George SZ**, Matheson JW, Wang YC, Cook KF, Mioduski JE, Choi SW. Single items of fear-avoidance beliefs scales for work and physical activities accurately identified patients with high fear. *Phys Ther*, 2009;89(8):770-785.
152. **George SZ**, Teyhen DS, Wu SS, Wright AC, Dugan JL, Yang G, Robinson ME, Childs JD. Psychosocial education improves low back pain beliefs: results from a cluster randomized clinical trial (NCT00373009) in a primary prevention setting. *Eur Spine J*, 2009 18(7):1050-1058.
153. Robinson ME, Teyhen DS, Wu SS, Wright AC, Dugan JL, Yang G, Childs JD, **George SZ**. Mental health symptoms in combat medic training: a longitudinal examination. *Mil Med*, 2009;174(6):572-577.
154. **George SZ** and Zeppieri G. Physical therapy utilization of graded exposure for patients with low back pain. *J Orthop Sports Phys Ther*, 2009;39(7):496-505.
155. Beneciuk JM*, Bishop MD, **George SZ**. Effects of upper-extremity neural mobilization on thermal pain sensitivity: a sham controlled study in asymptomatic participants. *J Orthop Sports Phys Ther*, 2009;39(6):428-438.
156. Werneke MW, Hart DL, **George SZ**, Stratford PW, Matheson JW, Reyes A. Clinical outcomes for patients classified by fear-avoidance beliefs and centralization phenomenon. *Archives Phys Med Rehabil*, 2009;90:768-777.

157. Lentz TA*, Barabas J, Bishop MD, Day T, **George SZ**. The relationship of pain intensity, physical impairment, and pain-related fear to function in patients with shoulder pathology. *J Orthop Sports Phys Ther*, 2009;39(4):270-7.
158. Hirsh AT, **George SZ**, Robinson ME. Pain assessment and treatment disparities: a virtual human technology investigation. *Pain*, 2009;143(1-2):106-113.
159. **George SZ** and Hirsh AT*. Psychological influence on experimental pain sensitivity and clinical pain intensity for patients with shoulder pain. *J Pain*, 2009;10(3):293-299.
160. Beneciuk JM*, Bishop MD, **George SZ**. Clinical prediction rules for physical therapy interventions: a systematic review. *Phys Ther*, 2009;89:114-124.
161. Lentz TA, Tillman SM, Moser MW, Indelicato PA, **George SZ**, Chmielewski TL. Factors associated with function after anterior cruciate ligament reconstruction. *Sports Health*, 2009;1(1) 47-53.
162. Dannecker EA and **George SZ**. A comparison of laboratory measures of escape and avoidance behavior. *J Pain*, 2009;10(1):53-59.
163. Chmielewski TL, Jones D, Day T, Tillman S, Lent TA, **George SZ**. The association of fear of movement/re-injury and function during anterior cruciate ligament reconstruction rehabilitation. *J Orthop Sports Phys Ther*, 2008;38(12):746-753.
164. Bialosky JE*, Hirsh AT, Robinson ME, **George SZ**. Manipulation of pain catastrophizing: an experimental study of healthy subjects. *J Pain Res*, 2008;1:35-41.
165. **George SZ**, Zeppieri G, Cere AL, Cere MR, Borut MS, Hodges MJ, Reed DM, Valencia C, Robinson ME. A randomized trial of behavioral physical therapy interventions for acute and sub-acute low back pain (NCT00373867). *Pain*, 2008;140:145-157.
166. **George SZ**, Dover GC, Wallace MR, Sack BK, Herbstman DM, Aydog E, Fillingim RB. Biopsychosocial influence on exercise-induced delayed onset muscle soreness at the shoulder: pain catastrophizing and catechol-O-methyltransferase (COMT) diplotype predict pain ratings. *Clin J Pain*, 2008; 24(9):793-801.
167. Hirsh AT, **George SZ**, Bialosky JE*, and Robinson ME. Fear of pain, pain catastrophizing, and acute pain perception: relative prediction and timing of assessment. *J Pain*, 2008; 9(9):806-812.
168. **George SZ**, Wallace MR, Wright TW, Moser MW, Greenfield WH, Sack BK, Herbstman DM, Fillingim RB. Evidence for a biopsychosocial influence on shoulder pain: pain catastrophizing and catechol-O-methyltransferase (COMT) diplotype predict clinical pain ratings. *Pain*, 2008;136(1):53-61.
169. Bialosky JE*, Bishop MD, Robinson ME, Barabas JA*, **George SZ**. The influence of expectation on spinal manipulation induced hypoalgesia: an experimental study in normal subjects. *BMC Musculoskelet Disord*, 2008;9:19.
170. **George SZ**, Childs JD, Fritz JM. Investigation of elevated fear-avoidance beliefs for patients with low back pain: a secondary analysis involving patients enrolled in physical therapy clinical trials. *J Orthop Sports Phys Ther*, 2008;38(2)50-58.

171. Mann BJ, Grana WA, Indelicato PA, **George SZ**. A survey of sports medicine physicians regarding psychological issues in athlete-patients. *Am J Sports Med*, 2007;35(12):2140-2147.
172. Peters C* and **George SZ**. Outcomes following plyometric rehabilitation for the young throwing athlete: a case report. *Physiother Theor Pract*, 2007;23(6):351-364.
173. **George SZ**, Childs JD, Teyhen DS, Wu SS, Wright AC, Dugan JL, Robinson ME. Rationale, design, and protocol for the prevention of low back pain in the military (POLM) trial (NCT00373009). *BMC Musculoskelet Disord*, 2007;8:92.
174. Dannecker EA, **George SZ**, Robinson ME. Influence and stability of pain anchors for an investigation of cold pressor pain tolerance. *J Pain*, 2007;8(6):476-482.
175. **George SZ**, Bialosky JB*, Wittmer VT, Robinson ME. Sex differences in pain drawing area for individuals with chronic musculoskeletal pain. *J Orthop Sports Phys Ther*, 2007;37(3) 115-121.
176. Fritz SL, **George SZ**, Wolf SL, Light KE. Participant perception of recovery as criterion to establish importance of improvement for constraint-induced movement therapy outcome measures: results from a preliminary study. *Phys Ther*, 2007;87(2):170-178.
177. Hirsh AT, **George SZ**, Riley JL, and Robinson ME. An evaluation of the construct and measurement of pain catastrophizing by the pain coping questionnaire. *Eur J Pain*, 2007;11:75- 81.
178. **George SZ**, Dover GC, Fillingim RB. Fear of pain influences outcomes following exercise induced delayed onset muscle soreness at the shoulder. *Clin J Pain*, 2007;1:76-84.
179. **George SZ**, Wittmer VT, Fillingim RB, Robinson ME. Sex and pain-related psychological variables are associated with thermal pain sensitivity for patients with chronic low back pain. *J Pain*, 2007;8(1):2-10.
180. Hicks GE, **George SZ**, Nevitt MA, Cauley JA, Vogt MT. Measurement of lumbar lordosis: Inter-rater reliability, minimum detectable change, and longitudinal variation. *J Spinal Disord and Tech*, 2006;19(7):501-506.
181. **George SZ**, Bishop MD, Bialosky JE*, Zeppieri G, Robinson ME. The immediate analgesic effects of spinal manipulation on thermal pain sensitivity. *BMC Musculoskelet Disord*, 2006;7:68.
182. **George SZ**, Fritz JM, Childs JD, Brennan GP. Sex differences in predictors of outcome in selected physical therapy interventions for patients with acute low back pain. *J Orthop Sports Phys Ther*, 2006;36(6):554-563.
183. **George SZ**, Wittmer VT, Fillingim RB, Robinson ME. Fear-avoidance beliefs and temporal summation of evoked thermal pain influence self-report of disability in patients with chronic low back pain. *J Occup Rehabil*, 2006;16(1):92-105.
184. **George SZ**, Dannecker EA, Robinson ME. Fear of pain, not pain catastrophizing, predicts acute pain intensity, but neither factor predicts tolerance or blood pressure response: an experimental investigation in pain-free individuals. *Eur J Pain*. 2006;10:457- 465.
185. Ilfeld BM, Gearen PF, Enneking FK, Berry LF, Spadoni EH, **George SZ**, Vandeborne K: Total hip arthroplasty as an overnight-stay procedure using an ambulatory continuous psoas compartment nerve block: a prospective feasibility study. *Reg Anesth Pain Med*. 2006; 31(2):113-118.

186. **George SZ**, Fritz JM, and McNeil DW. Fear-avoidance beliefs as measured by the fear-avoidance beliefs questionnaire (FABQ): change in FABQ is predictive of change in self-report of disability and pain intensity for patients with acute low back pain. *Clin J Pain*. 2006;22:197-203.
187. Ilfeld BM, Gearen PF, Enneking FK, Berry LF, Spadoni EH, **George SZ**, Vandeborne K: Total knee arthroplasty as an overnight-stay procedure using continuous femoral nerve blocks at home: a prospective feasibility study. *Anesth Analg*. 2006;102:87-90.
188. **George SZ**, Bialosky JE, Donald DA. The centralization phenomenon and fear-avoidance beliefs as prognostic factors for acute low back pain: a preliminary investigation involving patients classified for specific exercise. *J Orthop Sports Phys Ther*. 2005;35(9):580-587.
189. Robinson ME, Brown JL, **George SZ**, Edwards PS, Atchison JW, Hirsh AT, Waxenberg LB, Wittmer V, and Fillingim RB. Multidimensional success criteria and expectations for treatment of chronic pain: The patient perspective. *Pain Med*. 2005;6(5):336- 345.
190. **George SZ** and Hirsh AT*. Distinguishing patient satisfaction with treatment delivery from treatment effect: a preliminary investigation of patient satisfaction with symptoms following physical therapy treatment of low back pain. *Archives Phys Med Rehabil*. 2005;86:1338-1344.
191. Robinson ME, Dannecker EA, **George SZ**, Otis J, Atchison JW, Fillingim RB. Sex differences in the associations among psychological factors and pain report: a novel psychophysical study of patients with chronic low back pain. *J Pain*. 2005;6(7):463-470.
192. **George SZ** and Delitto A. Clinical examination variables discriminate between treatment based classification groups. *Phys Ther*. 2005;85:306-314.
193. Stevens JE, Walter GA, Okereke E, Scarborough JL, **George SZ**, Kelley MJ, Tillman SM, Gibbs JD, Elliot MA, Frimel TN, Gibbs CP, Vandeborne K. Muscle adaptations with immobilization and rehabilitation after ankle fracture. *Med Sci Sports Exerc*. 2004;36(10):1695-1701.
194. Robinson ME, **George SZ**, Dannecker EA, Jump RL, Hirsh AT, Gagnon CM, Brown JL. Sex differences in pain anchors revisited: further investigation of “most intense” pain events and common pain events. *Eur J Pain*. 2004;8:299-305.
195. **George SZ**, Bialosky JE, Fritz JM. Physical therapy management of a patient with acute low back pain and elevated fear-avoidance beliefs – a case report. *Phys Ther*. 2004;84(6):538-549.
196. **George SZ**, Fritz JM, Bialosky JE, Donald DA. The effect of a fear-avoidance based physical therapy intervention for patients with acute low back pain: results of a randomized clinical trial. *Spine*. 2003;28(23):2551-2560.
197. **George SZ**, Hicks GE, Nevitt MA, Cauley JA, Vogt MT. The relationship between lumbar lordosis and radiological variables and lumbar lordosis and clinical variables in older, African-American women. *J Spinal Disord and Tech*. 2003;16(2):200-206.
198. Fritz JM and **George SZ**. Identifying specific psychosocial factors in patients with acute, work-related low back pain: The importance of fear avoidance beliefs. *Phys Ther*. 2002;82(10): 973-983.
199. **George SZ**. Symptom characteristics of patients treated with slump stretching. *J Orthop Sports Phys Ther*. 2002;32(8):391-398.

200. **George SZ** and Delitto A. Management of the athlete with low back pain. *Clin Sports Med.* 2002;21(1):105-120.
201. **George SZ**, Fritz JM, Erhard RE. A comparison of fear-avoidance beliefs in patients with lumbar spine pain and cervical spine pain. *Spine.* 2001;26(19):2139-2145.
202. Fritz JM, **George SZ**, Delitto A. The role of fear-avoidance beliefs in acute low back pain: relationships with current and future disability and work status. *Pain.* 2001;94(1):7-15.
203. **George SZ.** Differential diagnosis and treatment for a patient with lower extremity symptoms. *J Orthop Sports Phys Ther.* 2000;30(8):468-72.
204. Fritz JM and **George S.** The use of a classification approach to identify subgroups of patients with acute low back pain. Interrater reliability and short-term treatment outcomes. *Spine.* 2000;25(1):106-14.

Submitted for Peer-Review

* - student or post-doctoral author mentored by SZG

Underline – senior author

1. Hsieh CJ, **George SZ**, Moser MW, Farmer KW, Chmielewski TL. Influences of psychosocial factors on rehabilitation outcomes following meniscectomy: a secondary analysis of a randomized controlled trial. *J Orthop Sports Phys Ther*, in review.
2. Bauer S, Vaughn I, Lentz T, Mills J, **George SZ**, Marlow NM, Fillingim RB, Harman J. Utilization of nonsurgical treatment approaches for osteoarthritis pain among medicare beneficiaries. *Archives Phys Med Rehabil*, in review.

Editorials and Invited

1. George SZ. Beliefs, behavior, and back pain: insights into psychologically informed management. *N C Med J*, 2017;78(5):333-334.
2. **George SZ.** The 21st John H.P. Maley Lecture: Pain management: roadmap to revolution. *Phys Ther*, 2017; 97(2): 217-226.
3. Main CJ and **George SZ.** Psychosocial influences on low back pain: why should you care? *Phys Ther*, 2011; 91(5):609-613.
4. **George SZ** and Robinson ME. Dynamic nature of the placebo response. *J Orthop Sports Phys Ther*, 2010;40(8):452-454.
5. **George SZ.** It came from the swamp: gators answer the call, *Orthopaedic Physical Therapy Practice.* 2008;20(4): 167.
6. Bialosky JE, **George SZ**, Bishop MD. How spinal manipulative therapy works: why ask why? *J Orthop Sports Phys Ther*, 2008;38(6):293-5.
7. **George SZ.** Out of the mouths of babes: student-cited barriers to evidence-based practice. *Orthop Phys Ther Pract*, 2007;19(1):5-6.

8. **George SZ.** Fear: a factor to consider in musculoskeletal rehabilitation. *J Orthop Sports Phys Ther*, 2006;36(5):264-266.

Letters to Editor, Responses, and Commentaries

1. Hinman RS, Buchbinder R, Craik RL, **George SZ**, Maher CG, Riddle DL. Is This a Clinical Trial? And Should It Be Registered? *Phys Ther*, 2015;95(6):810-814.
2. **George SZ.** Invited commentary on “Different Minimal Clinically Important Difference (MCID) Scores Lead to Different Clinical Prediction Rules for the Oswestry Disability Index when Using the Same Sample of Patients”. *J Man Manip Ther*, 2013; 21(2): 79-80.
3. Robinson ME and **George SZ.** Screening for problematic low back pain: STarT. *Pain*, 2012;153(11):2159-60.
4. Werneke MW, Deutscher D, and **George SZ.** In tribute: Dennis L. Hart PT, PhD, a functional outcome measurement visionary. *J Orthop Sports Phys Ther*, 2012;42(6):489-490.
5. **George SZ**, Beneciuk JM, Bishop MD. Author response to “On Clinical Prediction Rules for Physical Therapy Interventions...” *Phys Ther*, 2009; 89(4):394-395.
6. **George SZ** and Robinson ME. Response to Keele team’s response letter. *Pain*, 2009;(142):154-155.
7. Bialosky JE, Bishop MD, **George SZ.** Regional interdependence: a musculoskeletal examination model whose time has come. *J Orthop Sports Phys Ther*, 2008;38(3):159; author reply 160.
8. **George SZ** and Robinson ME. Risk and physical therapy. *J Orthop Sports Phys Ther*, 2007;37(9):570-1; author reply 571-2.
9. **George SZ** and Fritz JM. Authors’ response to letter to the Editor-in-Chief. *J Orthop Sports Phys Ther*, 2005;35(12):845-847.

Other Manuscripts

* - student author mentored by SZG

Underline – senior author

1. Kaplan S, Tilson J, Levine D, **George SZ**, Fay D, Jewell D, Wainner R, Hack L. Strategies for using the APTA Section on Research Doctor of Physical Therapy Education Evidence-Based Practice Curriculum Guidelines. *J Phys Ther Educ*, in press.
2. Prince M, Bialosky J, and **George SZ.** Multimodal physical therapy treatment of a pediatric patient presenting with complex regional pain syndrome Type1: a case report. *Orthop Phys Ther Pract*, 2015; in press.
3. Gornoski L, Coronado RA, and **George SZ.** Clinical outcomes of ETPS in conjunction with exercise for the treatment of patients with chronic knee pain: a case series. *Orthop Phys Ther Pract*, 2014; in press.

4. McCrea EC and **George SZ**. Outcome following augmented soft tissue mobilization for patients with knee pain: a case series. *Orthop Phys Ther Pract*, 2010;22(2):69-74.
5. Groth KR, Finnie L, **George SZ**. Varying responses to similar physical therapy interventions for cervical radiculopathy: a case series. *Orthop Phys Ther Pract*, 2010;22(2):83-89.
6. Dunn MK* and **George SZ**. Comparison of preoperative and postoperative functional and psychosocial outcome measures in a patient with acute noncontact knee dislocation: a case report. *Orthop Phys Ther Pract*, 2009;21(3):78-86.
7. Balla J* and **George SZ**. The use of a modified treatment based classification system to treat an adolescent with imaging evidence of a herniated disc. *Orthop Phys Ther Pract*, 2008;20(4):175-181.
8. Mastrogiovanni S* and **George SZ**. The association between leg length discrepancy and pre-operative total joint replacement: a case control study. *Orthop Phys Ther Pract*, 2008;20(4):182-187.
9. Butrimas NJ* and **George SZ**. Manual therapy for a patient diagnosed with multilevel cervical spondylosis: a case report. *Orthop Phys Ther Pract*, 2007;17(1):18-23.
10. Bargar CJ* and **George SZ**. Treatment of a young male patient with left upper arm pain and left arm numbness: a case report. *Orthop Phys Ther Pract*, 2007;17(1): 25-32.

Book Chapters and Monographs

1. **George SZ**. A physical therapist's perspective on manual therapy: clinical effectiveness and selected mechanism. Chapter 14 in *The science and clinical application of manual therapy*. Elsevier. Edinburgh (UK). Editors: King H, Jnig W, Patterson M (2011).
2. **George SZ**. Spinal pain. Chapter 16 in *Mechanisms and management of pain for the physical therapist*. International Association for the Study of Pain Press. Seattle, WA (USA). Editor: Sluka KA (2009).
3. Frey Law L and **George SZ**. Individual differences and pain variability. Chapter 4 in *Mechanisms and management of pain for the physical therapist*. International Association for the Study of Pain Press. Seattle, WA (USA). Editor: Sluka KA (2009).
4. **George SZ**. Contributor to *Writing case reports: a how to manual for clinicians*, 3rd edition. American Physical Therapy Association. Alexandria, VA (USA). Editor: Irene McEwen (2009).
5. **George SZ** and Bishop MD. Low back pain: causes and differential diagnosis. Chapter 9 in *Musculoskeletal rehabilitation, 1st edition, volume III (treatment of pathology and injuries)*. Saunders Elsevier. St. Louis, MO (USA). Editors: Magee DJ, Zachazewski JE, Quillen WS (2009).
6. **George SZ**. Psychological screening and management of the patient with low back pain. Orthopaedic Section, American Physical Therapy Association; Home Study Course 18.1.4 (2008); *Low back pain and the evidence for effectiveness of physical therapy interventions*.
7. **George SZ**, Delitto A, Lehman RC. Conservative treatment of athletes with low back syndromes. Chapter 29 in *Low back syndromes: integrated clinical management*, 1st edition. McGraw-Hill Companies, Inc. New York, NY. Editor: Morris CE (2006).

8. **George SZ** and Fritz JM. Physical therapy management of fear avoidance in patients with low back pain. Orthopaedic Section, American Physical Therapy Association; Home Study Course 13.1.2 (2003); *Including the patient in therapy: the power of psyche*.

Published Abstracts

1. Simon C, Gay C, Bishop M, George S. Biopsychosocial oriented phenotyping of chronic low back pain. *J Orthop Sports Phys Ther*, abstracted 2017.
2. Zeppieri G, Bialosky J, **George S**. Patient centered outcomes: characterizing patient subgroups based on importance of outcomes. *J Orthop Sports Phys Ther*, abstracted 2016.
3. Lentz T, Beneciuk J, **George S**. Performance of the OSPRO Yellow Flag Screening Tool in the first month of physical therapy: value added by psychological distress monitoring. *J Orthop Sports Phys Ther*, abstracted 2016.
4. Butera K, Lentz T, Beneciuk J, **George S**. Use of a modified STarT Back Screening Tool across different anatomical regions of musculoskeletal pain. *J Orthop Sports Phys Ther*, abstracted 2016.
5. Rhon D, Lentz T, **George S**. Moderation effects of pain catastrophizing and fear avoidance beliefs on the relationship between body symptom diagram score, pain intensity, and self-reported disability. *J Orthop Sports Phys Ther*, abstracted 2016.
6. Beneciuk J, Hill J, Campbell P, **George S**, Afolabi E, Dunn K, Foster N. Identifying treatment effect modifiers in the STarT Back Trial: A secondary analysis. *Bone Joint J*, 98-B(SUPP 6), 5. Accessed February 10, 2016 from http://www.bjjprocs.boneandjoint.org.uk/content/98-B/SUPP_6/5.
7. Coronado R, **George S**, Wegener S, Devin C, Cheng J, Aaronson O, Archer K. Postoperative pain catastrophizing and pressure pain sensitivity as risk factors for persistent pain and disability in patients after lumbar spine surgery. *J Pain*, abstracted 2015.
8. Simon C, Bishop M, Riley III J, Fillingim R, **George S**. Central pain processing measures are associated with movement-evoked pain report among older adults with chronic axial low back pain. *J Pain*, abstracted 2015.
9. Simon C, Coronado R, Valencia C, Greenfield W, **George S**. Rotator cuff tear severity versus concomitant surgical procedures in the prediction of pain and function after shoulder arthroscopy. *J Orthop Sports Phys Ther*, abstracted 2015.
10. **George S**, Wu S, Bialosky J, Zeppieri G, Lentz T, Osborne R, Rowe R, Dai Y, Pei Q, Beneciuk J. A red flag screening tool for orthopaedic physical therapy settings: results from the optimal screening for prediction of referral and outcome (OSPRO) cohort. *J Orthop Sports Phys Ther*, abstracted 2015.
11. Beneciuk J, Hagist B, **George S**. Implementation of the STarT Back approach for low back pain management in outpatient physical therapy settings: a non-randomized, parallel cohort study design. *J Orthop Sports Phys Ther*, abstracted 2015.
12. Beneciuk J, Lentz T, Wu S, Bialosky J, Zeppieri G, Osborne R, Rowe R, Dai Y, Pei Q, **George S**. Development of a yellow flag screening tool for orthopaedic physical therapy settings: results from the optimal screening for prediction of referral and outcome (OSPRO) cohort. *J Orthop Sports Phys Ther*, abstracted 2015.

13. Zeppieri. G, **George S.** The Relationship Between Kinesiophobia, Pain Catastrophizing, And Disability in Overhead Throwing Athletes Following Injury. *J Orthop Sports Phys Ther*, abstracted 2015.
14. Zeppieri. G, **George S.** Preliminary Results of Patient-Defined Success Criteria in Overhead Athletes in Outpatient Physical therapy Settings. *J Orthop Sports Phys Ther*, abstracted 2015.
15. Alappattu M, **George S**, Robinson M, Fillingim R, Moawad N, LeBrun E, Bishop M. Does the application of transvaginal lidocaine modify pain sensitivity in women with chronic pelvic pain? International Association for the Study of Pain, *15th World Congress on Pain*, abstracted 2014.
16. **George S**, Wallace M, Wu S, Moser M, Wright T, Farmer K, Greenfield W, Borsa P, Parr J, Fillingim R. Biopsychosocial influence on shoulder pain: translational findings across pre-clinical and clinical cohorts. International Association for the Study of Pain, *15th World Congress on Pain*, abstracted 2014.
17. **George S**, Wallace M, Wu S, Fillingim R. Investigation of gene x gene interactions in a model of exercise induced shoulder pain. *J Pain*, abstracted 2014.
18. Lentz T, **George S**, Zeppieri G, Moser M, Farmer K, Tillman S, Chmielewski T. Pain intensity, pain catastrophizing, kinesiophobia and self-reported function in the first year following anterior cruciate ligament reconstruction. *J Pain*, abstracted 2014.
19. Boissoneault J, Robinson M, **George S.** A review of predicting chronicity in patients with acute or sub-acute low back pain. *J Pain*, abstracted 2014.
20. Coronado R, Mackie L, Simon C, **George S.** Pain sensitivity questionnaire differentiates individuals with shoulder pain who demonstrate widespread sensitivity with quantitative sensory testing. *J Pain*, abstracted 2014.
21. Wandner L, Torres C, Bartley E, **George S**, Robinson ME. The effect of a virtual human perspective-taking intervention on pain assessment and treatment decisions. *J Pain*, abstracted 2014.
22. Simon C, Coronado R, Greenfield W, Wright T, Moser M, Farmer K, **George S.** Shoulder pathology and surgical procedure are not predictive of post-surgical temporal summation of second pain. *J Pain*, abstracted 2014.
23. Alappattu MJ, **George S**, Robinson ME, Fillingim RB, Bishop MD. Lack of viscera-somatic convergence in chronic pelvic pain in women. *J Pain*, abstracted 2014.
24. Beneciuk J and **George S.** Changes in physical therapist attitudes and beliefs about low back pain management following study related educational training. *J Orthop Sports Phys Ther*, abstracted 2014.
25. Bialosky J, Horn M, **George S**, Robinson M. The specific effects of spinal manipulative therapy on pain sensitivity, clinical outcomes, and patient satisfaction. *J Orthop Sports Phys Ther*, abstracted 2014.
26. Lentz T, Zeppieri G, Moser M, Farmer K, Tillman S, **George S**, Chmielewski T. First year recovery patterns differ among return to sport status groups following ACL reconstruction. *J Orthop Sports Phys Ther*, abstracted 2014.

27. Bohne C, **George S**, Zeppieri G. Knowledge of injury prevention and prevalence of risk factors for throwing injuries in a sample of youth baseball players. *J Orthop Sports Phys Ther*, abstracted 2014.
28. Lentz T, Zeppieri G, Moser M, Farmer K, Tillman S, George S, Chmielewski T. Derivation of prognostic test-item cluster for return to sport participation status 1 year following ACL reconstruction. *J Orthop Sports Phys Ther*, abstracted 2014.
29. Sorensen C, Callaghan J, **George S**, Van Dillen L. Differences in movement patterns during the active hip abduction test in low back pain developers and non low back pain developers.” *J Orthop Sports Phys Ther*, abstracted 2014.
30. Coronado R, Bialosky J, **George S**. Experimental pain sensitivity in individuals with spine pain: potential relevance to short-term clinical outcomes. *J Orthop Sports Phys Ther*, abstracted 2014.
31. Zeppieri G, Lentz TA, **George S**. The Relationship Between Psychological Factors and Patient-Defined Outcomes: A Pilot Study from an Outpatient Setting. *J Orthop Sports Phys Ther*. Abstracted 2014.
32. Simon C, Coronado RA, Valencia C, **George S**. Pathological versus psychological influence on post-operative shoulder recovery: comparison of age groups. *J Geriatr Phys Ther*, abstracted 2014.
33. Parr J, Fillingim R, Wallace M, Wu S, Borsa P, **George S**. Catechol-O-Methyltransferase and psychological interactions predict exercise induced muscle pain phenotypes. *J Pain*, abstracted 2013.
34. Beneciuk J and **George S**. Prediction and clinical outcome implications of sustained STarT back screening too high-risk status following 4-weeks of physical therapy for low back pain. *J Pain*, abstracted 2013.
35. Valencia C, Gay C, Zeppieri G, **George S**. Inducing temporal summation: the importance of relevant stimulus parameters. *J Pain*, abstracted 2013.
36. Wandner L, **George S**, Lok B, Torres C, Chuah J, Robinson ME. Pain decisions based on pain behavior of virtual humans. *J Pain*, abstracted 2013.
37. Valencia C, Coronado R, Simon C, **George S**. Pre-surgical physical therapy treatment: patient characteristics and impact on post-surgical shoulder pain and disability. *J Orthop Sports Phys Ther*, abstracted 2013.
38. Simon CB, Coronado RA, Valencia C, **George SZ**. Age differences in post-surgical shoulder recovery: examining the influence of psychological distress and experimental pain sensitivity. *J Geriatr Phys Ther*, abstracted 2013.
39. Hanney WJ, **George SZ**, Kolber MJ, Young, I, Patel C, Cleland JA. A standardized program of stretching and strengthening: The Influence on perceived pain and disability in those with neck pain. *J Orthop Sports Phys Ther*, abstracted 2013.
40. Hanney WJ, **George SZ**, Kolber MJ, Young, I, Patel C, Cleland JA. (2013) Preliminary development of a clinical prediction rule to identify patients with neck pain that may benefit from a standardized program of stretching and muscle performance exercise. *J Orthop Sports Phys Ther*, abstracted 2013.

41. Gornoski LE, Coronado RA, **George SZ**. Clinical outcomes of electro-therapeutic point stimulation in conjunction with exercise for the treatment of patients with chronic knee pain: a case series. *J Orthop Sports Phys Ther*, abstracted 2013.
42. Bialosky JE, Horn ME, **George SZ**, Robinson ME. Placebo mechanisms of spinal manipulative therapy in the treatment of individuals with low back pain. *J Orthop Sports Phys Ther*, abstracted 2013.
43. Lentz TA, **George SZ**, Zeppieri G, Chmielewski TL. Identification of individuals at risk for not returning to pre-injury levels of sports participation after ACL reconstruction due to fear of re-injury/lack of confidence. *J Orthop Sports Phys Ther*, abstracted 2013.
44. Hsieh CJ, Moser MW, **George SZ**, Chmielewski TL. Association of psychological factors and knee pain with knee function from pre-to post- menisectomy. *J Orthop Sports Phys Ther*, abstracted 2013.
45. Herder B, Chmielewski TL, Lentz TA, Zeppieri G, **George SZ**. Fear of movement/re-injury and activity self-efficacy in early and late phases of ACL reconstruction rehabilitation. *J Orthop Sports Phys Ther*, abstracted 2013.
46. Beneciuk JM, Robinson ME, **George SZ**. The STarT back screening tool: construct validity incorporating cluster analysis. *J Orthop Sports Phys Ther*, abstracted 2013.
47. Beneciuk JM, Bishop MD, Fritz JM, Robinson ME, Asal NR, Nisenzon AN, **George SZ**. The STarT back screening tool and individual psychological measures: prognostic indicator or treatment monitoring for low back pain clinical outcomes. *J Orthop Sports Phys Ther*, abstracted 2013.
48. Coronado RA, Parr JJ, Simon CB Valencia C, **George SZ**. Catastrophizing predicts resting pain following exercise-induced shoulder injury, but experimental responses predict pain during activity. *J Orthop Sports Phys Ther*, abstracted 2013.
49. Wurtzel W and **George S**. Utilization of a multiple-construct psychosocial measure for patients with musculoskeletal pain: a case series. *J Orthop Sports Phys Ther*, abstracted 2013.
50. Sorensen CJ, Johnson MB, **George SZ**, Callaghan JP, Van Dillen LR. The relationship between psychological factors and low back pain symptom intensity during prolonged standing in back-healthy people: A preliminary study. *Spine J*, 2012;12:31S.
51. Simon CB, Coronado RA, Valencia C, Fillingim RB, Wright TW, Moser M, Farmer KW, **George SZ**. Age differences in experimental pain sensitivity for pre-operative shoulder patients. International Association for the Study of Pain, *14th World Congress on Pain*, abstracted 2012.
52. Coronado RA, **George SZ**, Horn M, Bishop MD, Bialosky JE. Preliminary cluster analysis of experimental pain responses in patients with low back and neck pain. International Association for the Study of Pain, *14th World Congress on Pain*, abstracted 2012.
53. Valencia C, Fillingim RB, Bishop M, Wu SS, Wright TW, Moser M, Farmer KW, **George SZ**. The role of central pain processing in post-operative shoulder disability. International Association for the Study of Pain, *14th World Congress on Pain*, abstracted 2012.
54. Wandner LD, Heft MW, Lok B, Hirsh AT, **George SZ**, Horgas A, Atchinson JW, Torres CA, Robinson ME. Healthcare professionals' pain assessment and treatment decisions using virtual human

- technology. International Association for the Study of Pain, *14th World Congress on Pain*, abstracted 2012.
55. Anderson RJ, Craggs JG, Bialosky JE, Bishop MD, **George SZ**, Staud R, Robinson ME. Variability in response to a temporal summation of second pain protocol: Not everyone winds up. International Association for the Study of Pain, *14th World Congress on Pain*, abstracted 2012.
 56. **George S**, Parr J, Wallace M, Wu S, Borsa P, Fillingim R. Genetic and psychological risk factors are associated with pain and disability in an experimentally induced acute shoulder pain model. *J Pain*, abstracted 2012.
 57. Valencia C, Fillingim R, Bishop M, Wu S, **George S**. Investigation of central pain processing in post-operative shoulder pain. *J Pain*, abstracted 2012.
 58. Parr J, Fillingim R, Wallace M, Wu S, Borsa P, **George S**. Genetic risk factors are associated with physical impairment in an experimentally induced acute shoulder pain model. *J Pain*, abstracted 2012.
 59. **George S**, Childs J, Teyhen D, Wu S, Dugan J, Wright A, Robinson M. First episode of self-reported low back pain during military service: predictors from an inception cohort. *J Orthop Sports Phys Ther*, abstracted 2012.
 60. Coronado R, Valencia C, **George S**. Experimental pain testing suggests peripheral and central pain responses in patients with unilateral shoulder pain. *J Orthop Sports Phys Ther*, abstracted 2012.
 61. Beneciuk J, Hart D, Werneke M, **George S**. Decreases in depressive symptoms reflect improvements in musculoskeletal pain and functional status outcomes across different anatomical locations. *J Orthop Sports Phys Ther*, abstracted 2012.
 62. Valencia C, Coronado R, Simon C, **George S**. Psychological factors are associated with pain intensity and disability in patients with shoulder pain. *J Orthop Sports Phys Ther*, abstracted 2012.
 63. Zeppieri G, Atchison J, Farmer K, Moser M, **George S**. Longitudinal assessment of patient defined success criteria in outpatient physical therapy settings. *J Orthop Sports Phys Ther*, abstracted 2012.
 64. Hsieh CJ, **George S**, Chmielewski T. Quadriceps strength deficits after meniscal tear are influenced by voluntary activation level and pain catastrophizing. *J Orthop Sports Phys Ther*, abstracted 2012.
 65. Lentz T, Chmielewski T, Tillman S, Indelicato P, Moser M, Herder B, **George S**. Activity following ACL reconstruction: what do patients fear? *J Orthop Sports Phys Ther*, abstracted 2012.
 66. Lentz T, Zeppieri G, Moser M, Indelicato O, **George S**, Chmielewski T. Psychosocial factors are related to resolution of knee impairments in early rehabilitation following ACL reconstruction. *J Orthop Sports Phys Ther*, abstracted 2012.
 67. Chmielewski T, **George S**, Tillman S, Indelicato P, Moser M, Shuster J, Trumble T, Lentz T, Cicuttini F, Leeuwenburgh C. Effect of plyometric exercise intensity on knee function and articular cartilage biomarkers following ACL reconstruction. *J Orthop Sports Phys Ther*, abstracted 2012.
 68. Sorensen C, Johnson M, **George S**, Van Dillen L. Validity of a model for low back pain symptom development during prolonged standing. *J Orthop Sports Phys Ther*, abstracted 2012.

69. Bishop M, Horn M, Gay C, **George S**. Comparison of hypoalgesic responses to manual therapy interventions in healthy volunteers. *J Orthop Sports Phys Ther*, abstracted 2012.
70. Gay C, Bialosky J, **George S**, Bishop M. Association between the magnitude of temporal summation and current level and duration of low back pain. *J Orthop Sports Phys Ther*, abstracted 2012.
71. Miller G, Senesac C, Day J, George S. Comparison of critical thinking measures for DPT students. *J Phys Ther Educ*, abstracted 2012.
72. Butera K and George S. Assessing balance in geriatric orthopedic and neurologic populations using two standard measures. *J Neurol Phys Ther*, abstracted 2012.
73. Hsieh CJ, Dominguez JA, Moser MW, Indelicato PA, Cicuttini FM, **George SZ**, Chielewski TL. Gait asymmetry after meniscal tear is associated with knee pain intensity and fear of movement/re-injury. *World Congress on Osteoarthritis*, abstracted 2011.
74. Larkin KA, Borsa PA, Parr JJ, **George SZ**. Pain intensity with abduction consistently associated with shoulder disability during recovery of induced muscle pain. *J Athl Train*, abstracted 2011.
75. Beneciuk JM, Robinson ME, **George SZ**. The fear-avoidance model of musculoskeletal pain and low back pain subgrouping: results of a cluster analysis. *J Pain*, abstracted 2011
76. Valencia C, Fillingim RB, **George SZ**. Experimental pain sensitivity does not differ three months after surgery in patients with high and low clinical pain intensity. *J Pain*, abstracted 2011
77. Parr JJ, Borsa PA, Fillingim RB, Tillman MD, Manini TM, Gregory CM, **George SZ**. Fear of pain and pain catastrophizing predict pain intensity using an induced muscle injury model regardless of timing of assessment. *J Pain*, abstracted 2011.
78. **George S** and Stryker S. Investigation of fear-avoidance beliefs and clinical outcomes across multiple anatomical locations. *J Orthop Sports Phys Ther*, abstracted 2011.
79. **George S**, Lentz T, Zeppieri Jr G, Lee D, Chmielewski T. Psychometric analysis of the Tampa Scale for Kinesiophobia in patients with anterior cruciate ligament reconstruction. *J Orthop Sports Phys Ther*, abstracted 2011.
80. Coronado R, Hart D, **George S**. Comorbidity rates for patients presenting to outpatient physical therapy. *J Orthop Sports Phys Ther*, abstracted 2011.
81. Bialosky J, Bishop M, **George S**. Pain sensitivity associated with carpal tunnel syndrome and clinical relevance. *J Orthop Sports Phys Ther*, abstracted 2011.
82. Beneciuk J, **George S**, Fritz J. Treatment-based classification subgroups among Start Back Screening Tool risk categories in patients seeking outpatient physical therapy. *J Orthop Sports Phys Ther*, abstracted 2011.
83. Lentz T, Zeppieri Jr G, Moser M, Indelicato P, **George S**, Chmielewski T. Fear of re-injury/low confidence 1 year after ACL reconstruction: high prevalence and altered self-ratings. *J Orthop Sports Phys Ther*, abstracted 2011.
84. Zeppieri Jr G, Lentz T, Atchison J, Indelicato P, Moser M, Vincent K, **George S**. Patient defined success criteria in outpatient physical therapy settings. *J Orthop Sports Phys Ther*, abstracted 2011.

85. Werneke M, Hart D, **George S**. Improvement in depressive symptoms and somatization affects functional status change in patients with lumbar impairments. *J Orthop Sports Phys Ther*, abstracted 2011.
86. Hart D, Werneke M, **George S**. Effect of fear-avoidance, somatization, and depressive symptoms on discharge functional status in patients with lumbar impairments. *J Orthop Sports Phys Ther*, abstracted 2011.
87. Childs J, Wu S, Van Wyngaarden J, Dougherty B, Ladislav B, Helton G, Teyhen D, **George S**. Predictors of web-based response rate in the Prevention of Low Back Pain in the Military trial. *J Orthop Sports Phys Ther*, abstracted 2011.
88. Stutts LA, Hirsh AT, **George SZ**, Robinson ME. The influence of patient characteristics on pain assessment: An investigation using virtual human technology. *J Pain*, abstracted 2010.
89. **George SZ** and Robinson ME. Patient satisfaction with behavioral physical therapy interventions: secondary analysis from a randomized clinical trial (NCT00373867). *J Orthop Sports Phys Ther*, abstracted 2010.
90. Childs JD, Teyhen DS, Wright AC, Dugan JL, Casey P, McCoy-Singh K, Weston A, **George SZ**. The effects of traditional sit-up training versus core stabilization exercises on musculoskeletal injury rates in US Army Soldiers: a cluster randomized trial (NCT00373009). *J Orthop Sports Phys Ther*, abstracted 2010.
91. Beneciuk JM, Bishop MD, **George SZ**. Immediate effects of thoracic spine manipulation on thermal pain sensitivity. *J Orthop Sports Phys Ther*, abstracted 2010.
92. Chmielewski TL, Zeppieri G, Rademaker M, Lentz TA, Tillman SA, **George SZ**, Indelicato PA, Moser MW. Changes in psychosocial factor levels and influence on function over 12 weeks after ACL reconstruction. *J Orthop Sports Phys Ther*, abstracted 2010.
93. Valencia C, Beneciuk J, **George S**. Fear-avoidance beliefs questionnaire consistently associated with clinical outcome measures in patients with chronic low back pain. *J Orthop Sports Phys Ther*, abstracted 2010.
94. Hart DL, Werneke MW, **George SZ**. Fear-avoidance beliefs of physical activities and risk-adjusted functional status for patients with lumbar impairments. *J Orthop Sports Phys Ther*, abstracted 2010.
95. Lentz TA, Tillman SM, Zeppieri G, **George SZ**, Moser MW, Indelicato PA, Chmielewski TL. Identification of factors that predict return to pre-injury level of sport participation 1 year following ACL reconstruction. *J Orthop Sports Phys Ther*, abstracted 2010.
96. Bialosky JE and **George SZ**. Factors predicting improved outcomes for individuals with carpal tunnel syndrome receiving upper extremity manual therapy. *J Orthop Sports Phys Ther*, abstracted 2010.
97. Horn M, **George S**, and Bishop M. Peripheral and central sensitization in induced low back pain. *J Orthop Sports Phys Ther*, abstracted 2010.
98. Valencia C and **George S**. Temporal summation in patients with shoulder pain: clinical and psychological correlates. *J Pain*, abstracted 2009.

99. **George S**, Zeppieri G, Robinson M, Valencia C. Psychometric properties of the fear of daily activities questionnaire (FDAQ) for patients with low back pain. *J Pain*, abstracted 2009.
100. Vincent HK, Omli MR, Day T, Machek M, Vincent KR, Braith RW, **George SZ**. Obesity is associated with lumbar pain related fear of movement and self reported mobility impairment. *Med Sci Sports Exerc*, abstracted 2009.
101. **George SZ**, Teyhen DS, Wu SS, Wright A, Dugan JL, Yang G, Robinson ME, Childs JD. Psychosocial education improves low back pain beliefs: results from a cluster randomized clinical trial (NCT00373009). *J Orthop Sports Phys Ther*, abstracted 2009.
102. Valencia C and **George SZ**. Socioeconomic status influences the relationship among fear-avoidance beliefs about work and disability. *J Orthop Sports Phys Ther*, abstracted 2009.
103. Beneciuk JM and **George SZ**. Clinical prediction rules pertaining to interventions used in physical therapy outpatient orthopaedic settings: a systematic review. *J Orthop Sports Phys Ther*, abstracted 2009.
104. Lentz TA, Tillman SM, Moser MW, Indelicato PA, **George SZ**, Chmielewski TL. Clinical factors that differ between return to sport status groups in patients with ACL reconstruction. *J Orthop Sports Phys Ther*, abstracted 2009.
105. Childs JD, **George SZ**, Wright A, Dugan JL, Benedict T, Bush J, Fortenberry A, Preston J, McQueen R, Teyhen DS. The effects of traditional sit-up training versus core stabilization exercises on sit-up performance in US Army soldiers: a cluster randomized trial (NCT00373009). *J Orthop Sports Phys Ther*, abstracted 2009.
106. Teyhen, DS, Childs JD, Hall NM, Gervacio SC, Lopez JA, Mitchler JR, Wright A, Dugan JL, **George SZ**. The influence of sex, height, and weight on trunk muscle thickness and endurance. *J Orthop Sports Phys Ther*, abstracted 2009.
107. Hart DL, Werneke MW, George SZ, Matheson JW, Wang YC, Cook KF, Mioduski JE, Choi SW. Single items of fear-avoidance beliefs scales for work and physical activities accurately identified patients with high fear. *J Orthop Sports Phys Ther*, abstracted 2009.
108. Jones D, **George SZ**, Rivett J, Wolfe MK, Chmielewski TL. Fear of movement/reinjury and self-efficacy are associated with function in subjects with knee injury. *J Orthop Sports Phys Ther*, abstracted 2009.
109. Chmielewski TL, Tillman SM, Dunn JC, Lentz TA, **George SZ**, Indelicato PA, Moser MW. Elevated kinesiophobia in football players is associated with altered movement during a jump-landing task. *J Athl Train*, abstracted 2008.
110. Robinson M, Wittmer V, **George S**, Beneciuk J, Fillingim R. Opioids for chronic pain: to wean or not to wean. *J Pain*, abstracted 2008.
111. **George S**, Valencia C, Robinson M. The effect of evidence-based education modifications on fear-avoidance beliefs and pain catastrophizing for patient with low back pain. *J Pain*, abstracted 2008.

112. **George S**, Wittmer V, Beneciuk J, Fillingim R, and Robinson M. The influence of negative mood and pain catastrophizing on outcomes from a chronic pain rehabilitation program. *J Pain*, abstracted 2008.
113. **George S**, Dover G, Wallace M, Sack B, Herbstman D, Aydog E, Neff J, Fleming M, and Fillingim R. Biopsychosocial influence on induced shoulder pain. *J Pain*, abstracted 2008.
114. Hirsh A, **George S**, Fillingim R, Perlstein W, Manamalkav S, Robinson M. Investigating pain assessment and treatment disparities: a novel virtual human technology application. *J Pain*, abstracted 2008.
115. Bialosky J, **George S**, Hirsh A, Galmish R, Robinson M. A randomized study of the effects of catastrophizing on experimental pain. *J Pain*, abstracted 2008.
116. **George S**, Cere A, Zeppieri G, Cere M, Borut M, Hodges M, Valencia C, Robinson M. Behavioral interventions for sub-acute low back pain. *J Orthop Sports Phys Ther*, abstracted 2008.
117. Bialosky J, **George S**, Barabas J, Bishop M, Robinson M. The effect of subject expectation on spinal manipulation induced hypoalgesia. *J Orthop Sports Phys Ther*, abstracted 2008.
118. Bialosky J, **George S**, Bishop M, Zeppieri G, Robinson M. Immediate effects of spinal manipulative therapy in subjects with low back pain: a pilot study. *J Orthop Sports Phys Ther*, abstracted 2008.
119. Bishop M and **George S**. Interaction between kinesiophobia and pain amplification in acute back pain. *J Orthop Sports Phys Ther*, abstracted 2008.
120. Lentz T, Barabas J, Day T, Bishop M, **George S**. The relationship of physical impairment, pain, and kinesiophobia to disability in patients with shoulder pathology. *J Orthop Sports Phys Ther*, abstracted 2008.
121. Lentz T, Tillman S, Moser M, Indelicato P, **George S**, Chmielewski T. Identifying impairments that predict function: a preliminary step in developing return-to-play guideline for ACL reconstruction. *J Orthop Sports Phys Ther*, abstracted 2008.
122. Chmielewski T, Jones D, Day T, Tillman S, **George S**. The association of fear of re-injury and function during anterior cruciate ligament reconstruction rehabilitation. *J Orthop Sports Phys Ther*, abstracted 2008.
123. Dover GC, Aydog E, Neff JS, Fleming M, **George S**. What predicts self reported outcomes after exercise-induced delayed onset muscle soreness of the shoulder? *Medicina Sportiva Bohemica et Slovaca*, abstracted 2007.
124. **George SZ**, Childs JD, Teyhen DS, Wu SS, Wright AC, Dugan JL, Robinson ME. Rationale, design, and protocol for the prevention of low back pain in the military (polm) trial (NCT00373009). *Proceedings of the 10th Annual Force Health Protection Conference*, abstracted 2007.
125. **George S**, Wallace M, Wright T, Moser M, Greenfield W, Sack B, Herbstman D, Fillingim R. Evidence for biopsychosocial factors' influence on shoulder pain. *J Pain*, abstracted 2007.

126. Staud R, Bovee C, Whittemore B, Inosencio N, **George S**, Robinson M, Price D. Effects of eccentric exercise on pain and pain sensitivity in patients with fibromyalgia and normal controls: evidence of functional anti-hyperalgesic. *J Pain*, abstracted 2007.
127. Hirsh A, **George S**, Bialosky J, Robinson M. Fear of pain, pain catastrophizing, and acute pain perception: relative prediction and timing of assessment. *J Pain*, abstracted 2007.
128. Hassinger A, **George S**, Robinson M. An examination of the relationship of fear avoidance to disability: a quantitative review. *J Pain*, abstracted 2007.
129. Dannecker E and **George S**. Laboratory measures of pain avoidance and pain tolerance. *J Pain*, abstracted 2007.
130. **George SZ**, Fritz JM, Childs JD. Elevated fear-avoidance beliefs for subjects participating in physical therapy clinical trials. *J Orthop Sports Phys Ther*, abstracted 2007.
131. Chmielewski TL, Day T, Tillman SM, Moser MW, **George SZ**. Fear of re-injury is a potential factor in functional outcome after anterior cruciate ligament reconstruction. *J Orthop Sports Phys Ther*, abstracted 2007.
132. Bishop M, George SZ, McNally A. Improvement in range of motion after a stretching program: changes in tissue properties? *J Orthop Sports Phys Ther*, abstracted 2007.
133. Bialosky JE, **George SZ**, Bishop MD. Manual therapy induced analgesia: a comparison of healthy subjects and those with low back pain. *J Manual Manipulative Ther*, abstracted 2006.
134. **George S**, Dover G, Fillingim R. Pain related fear influences pain, physical impairment, disability, and kinesiophobia following delayed onset muscle soreness at the shoulder. *J Pain*, abstracted 2006.
135. Dannecker E, **George S**, Robinson, M. Influence and stability of pain scale anchors. *J Pain*, abstracted 2006.
136. **George SZ**, Bialosky JE, Wittmer VT, Robinson ME, The influence of sex, personality, and coping style on the pain drawing. *J Orthop Sports Phys Ther*, abstracted 2006.
137. **George SZ**, Bishop MD, Hurlburt M, Shumrak, G, Villa J, Zeppieri G. Immediate effect of spinal manipulation on temporal summation of pain. *J Orthop Sports Phys Ther*, abstracted 2006.
138. Ilfeld BM, Gearen PF, Enneking FK, **George SZ**, Vandenborne K. Total hip arthroplasty as an overnight-stay procedure using ambulatory perineural local anesthetic infusion: a prospective pilot feasibility study. *Anesthesiology*, abstracted 2005.
139. Ilfeld BM, Gearen PF, Enneking FK, **George SZ**, Vandenborne K. The effects of ambulatory continuous femoral nerve blocks on readiness-for-discharge following total knee arthroplasty: a randomized, double-blind, placebo-controlled pilot study. *Anesthesiology*, abstracted 2005.
140. Ilfeld BM, Gearen PF, Enneking FK, **George, SZ**, Vandenborne K. Total knee arthroplasty as a 23-hour stay procedure using ambulatory perineural local anesthetic infusion: a prospective feasibility study. *Reg Anesth Pain Med*, abstracted 2005.

141. Ilfeld BM, Gearen PF, Enneking FK, **George, SZ**, Vandeborne K. Effect of posterior lumbar plexus perineural local anesthetic infusion on postoperative functional ability following total hip arthroplasty. *Reg Anesth Pain Med*, abstracted 2005.
142. Hirsh A, **George S**, Riley J, Robinson M. Sex differences and construct redundancy of the coping strategies questionnaire – catastrophizing scale. *J Pain*, abstracted 2005.
143. **George S**, Wittmer V, Fillingim R, Robinson M. Does experimental pain sensitivity contribute to reports of clinical pain intensity and disability? *J Pain*, abstracted 2005.
144. **George S**, Wittmer V, Fillingim R, Robinson M. Psychological influence on central sensitization of pain for patients with chronic low back pain. *J Pain*, abstracted 2005.
145. **George SZ**, Fritz JM, Childs JD. Sex differences in response to physical therapy interventions for low back pain. *J Orthop Sports Phys Ther*, abstracted 2005.
146. Ilfeld BM, Gearen PF, Enneking FK, Mace JA, Spadoni EH, Berry LF, **George SZ**, Vandeborne K. Effect of femoral perineural local anesthetic infusion on postoperative functional ability following total knee arthroplasty. *Anesthesiology*, abstracted 2004.
147. Brown J, Edwards P, **George S**, Fillingim R, Waxenberg L, Atchison J, Gremillion H, Robinson M. Patient centered success criteria and expectations for treatment: a comparison of spine pain and facial pain patients. *J Pain*, abstracted 2004.
148. Hirsh A, Chung S, O'Brien E, **George S**, Cianfini L, Atchison J, Gremillion H, Waxenberg L, Robinson M. Does the catastrophizing subscale of the coping strategies questionnaire provide unique information regarding the pain experience? *J Pain*, abstracted 2004.
149. Edwards P, Riley J, Brown J, **George S**, Fillingim R, Waxenberg L, Atchison J, Wittmer V, Robinson M. Patients' success criteria predicted by distress and expectations for treatment. *J Pain*, abstracted 2004.
150. **George SZ**, Bialosky JE, Donald DA. Symptom centralization and fear-avoidance beliefs as prognostic factors for low back pain. *J Orthop Sports Phys Ther*, abstracted 2004.
151. Robinson ME, Brown JL, **George SZ**, Edwards PS, Atchison JW, Hirsh AT, Waxenberg LB, Wittmer V, Fillingim RB. A preliminary investigation of patient-centered outcomes in patients with chronic pain. *Arch Phys Med Rehab*, abstracted 2003.
152. Brown JL, Jump RL, **George SZ**, Fillingim RB, Robinson ME. What constitutes treatment success? A look at the patient's perspective. *J Pain*, abstracted 2003.
153. **George SZ**, Fritz JM, Bialosky JE, Donald DA. The effect of a fear-avoidance based physical therapy intervention for patients with acute low back pain. four week results from a randomized clinical trial. *J Orthop Sports Phys Ther*, abstracted 2003.
154. Hicks GE, **George SZ**, Vogt MT, Nevitt MA, Cauley JA. Measurement of lumbar lordosis: inter-rater reliability and longitudinal Variation. *Proceedings of the Annual Meeting of the International Society for the Study of the Lumbar Spine*, abstracted 2002.
155. **George SZ**, Hicks GE, Vogt MT, Nevitt MA, Cauley JA. The relationship between lumbar lordosis and radiological variables and lumbar lordosis and clinical variables in older, African-

American women. *Proceedings of the Annual Meeting of the International Society for the Study of the Lumbar Spine*, abstracted 2002.

156. **George SZ**, Fritz JM, and Erhard RE. A comparison of fear avoidance beliefs in patients with lumbar spine pain and patients with cervical spine pain. *J Orthop Sports Phys Ther*, abstracted 2002.
157. Fritz JM, **George S**. The use of a classification approach to identify subgroups of patients with acute low back pain: inter-rater reliability and short-term treatment outcomes. *J Orthop Sports Phys Ther*, abstracted 2000.

Presentations

Physical Therapy Journal Discussion Podcasts

- October 2014 The Therapeutic Alliance as an Intervention. *Participants*: Jorge Fuentes, PT, MScRS, PhD and Paulo Ferreira BPT, MSc, PhD. *Moderator*: **Steven George, PT, PhD**
- July 2014 Physical Therapist-Delivered Cognitive-Behavioral Therapy. *Participants*: Gwendolen Jull, MPhty, PhD, FACP; Mandy Nielsen, PhD, BSocWk (Hons); and Chris Main, PhD, FBPsS. *Moderator*: **Steven George, PT, PhD**
- January 2014 Factors Associated with Paraspinal Muscle Asymmetry: A Study of Male Twins. *Participants*: Maryse Fortin, BSc, PhD, CAT(C); Michele Battié, BSc, MSC, PhD; Mark Bishop, PT, PhD; and **Steven George, PT, PhD**. *Moderator*: Leonardo Costa, PT, PhD.
- July 2013 Spinal Manipulative Therapy and Low Back Pain. *Participants*: Leonardo Costa, PT, PhD and Chad Cook PT, PhD, MBA, OCS, FAAOMPT. *Moderator*: **Steven George, PT, PhD**.
- August 2012 Electrotherapy and pain. *Participants*: Myrto Dounavi, PhD, Kathleen Sluka, PT, PhD and Meryl Roth Gersh, PT, PhD. *Moderator*: **Steven George, PT, PhD**.
- March 2012 Exercise treatments for patients with low back pain. *Participants*: Luciana Macedo, PT, PhD and Nadine Foster, DPhil, BSc(Hons), MCSP, PGCE. *Moderator*: **Steven George, PT, PhD**.

International Presentations – Invited

- October 2014 The spectrum of low back pain: from cells to systems. Topical workshop at the the 15th World Congress on Pain, International Association for the Study of Pain, Buenos Aires (Argentina)
- October 2013 Psychological influences on pain perception: general review and implications for patients with pelvic pain. Invited speaker at the International Pelvic Pain Society Annual Fall Meeting in Orlando FL (USA)
- May 2013 Biopsychosocial influences on shoulder pain: recent findings and future directions. Invited speaker for the Alan Edwards Centre for Research on Pain Frontiers in Pain Research Lecture Series hosted by McGill University, Montreal QC (Canada)

- May 2012 Psychologically informed therapists. Keynote speaker at the 1st Alberta Occupational Rehabilitation Forum hosted by the University of Alberta, Millard Health, Worker's Compensation Board of Alberta, and Alberta Innovates Health Solutions, Edmonton, AB (Canada)
- April 2012 Psychologically informed practice for low back pain: implications for manual therapy researchers and practitioners. Plenary speaker at Using Manual and Conventional Therapies to Enhance Musculoskeletal Health conference hosted by the University of North Texas Osteopathic Research Center, Fort Worth, TX (USA)
- August 2010 Subgrouping low back pain: an answer for a major problem? Plenary speaker at Pain, Mind, and Movement III, Official Satellite Symposium of the 13th World Congress on Pain, International Association for the Study of Pain, Montreal, QC (Canada)
- August 2010 Spinal manipulation for low back pain: a brief review of responder subgroups and potential mechanisms. Keynote speaker at 2010 MDT Conference of the Americas, Striving for Clinical Excellence in an Era of Evidence Based Medicine, Mckenzie Institue (Americas Region), Baltimore, MD (USA)
- March 2008 A physical therapist's perspective on manual therapy: clinical effectiveness and selected mechanisms. Plenary speaker at International Conference for Delineating the Evidence Based for Somato-Visceral Interactions and Autonomic Mechanisms of Manual Therapy, Osteopathic Research Center and National Institutes of Health, Fort Worth, TX (USA)

International Presentations – Refereed Paper or Poster

- October 2014 Biopsychosocial influence on shoulder pain: translational findings across pre-clinical and clinical cohorts. Poster presentation at the 15th World Congress on Pain, International Association for the Study of Pain, Buenos Aires (Argentina)
- August 2012 Biopsychosocial influence on shoulder pain: preliminary findings from a post-operative cohort. Poster presentation at the 14th World Congress on Pain, International Association for the Study of Pain, Milan, QC (Italy)
- August 2010 Depressive symptoms influence musculoskeletal pain intensity more than anatomical location for patients seeking outpatient physical therapy. Poster presentation at the 13th World Congress on Pain, International Association for the Study of Pain, Montreal, QC (Canada)
- May 2002 Relationship between lumbar lordosis and radiological variables and lumbar lordosis and clinical variables in older, African-American women. Poster presentation at the Annual Meeting, International Society for the Study of the Lumbar Spine, Cleveland, OH (USA)

National Presentations – Invited

- April 2016 An Update on OPT-IN (Orthopaedic Physical Therapy – Investigator Network). Invited lecture for the Leader in Physical Therapy at the Ohio State University, Columbus, OH.

- April 2016 An Update on OPT-IN (Orthopaedic Physical Therapy – Investigator Network). Invited lecture for the Gresham Visiting Professorship hosted by University at Buffalo, State University of New York, Buffalo, NY.
- July 2015 Current state of pain research and management. Keynote address (with Kathleen Sluka) for the American Physical Therapy Association Section on Research Retreat – Piecing together the pain puzzle: the biopsychosocial model. Retreat at Bryant University, Smithfield, RI.
- July 2015 Biopsychosocial influence on shoulder pain. Invited talk in the psychosocial aspects of pain session for the American Physical Therapy Association Section on Research Retreat – Piecing together the pain puzzle: the biopsychosocial model. Retreat at Bryant University, Smithfield, RI.
- March 2014 Moving away from structural diagnosis: psychological screening for patients with low back pain. Invited lecture for the Spine Outcome Alliance of Rochester Conferences hosted by University of Rochester, Rochester, NY.
- April 2013 Biopsychosocial influences on shoulder pain: recent findings and future directions. Invited lecture for the Blaustein Pain Conference hosted by Johns Hopkins University, Baltimore, MD.
- September 2012 Rationale, results, and regrets: lessons learned from the Prevention of Low Back Pain in the Military (POLM) trial. Keynote speaker at the 23rd Annual Steven J. Rose Symposium (Pain: Mechanisms and Clinical Applications), Washington University School Medicine (Program in Physical Therapy), St. Louis MO.
- October 2011 An update on the evidence for use of yellow flags for management of low back pain. Plenary presentation at the 2011 Impairment without Disability: Fourth Annual Conference, Duluth, MN.
- October 2011 Evidence that manual therapy favorably alters central sensitization of nociceptive input. Plenary presentation at the 55th Annual Research Conference for the American Osteopathic Association, Orlando FL.
- October 2008 How does manual therapy inhibit pain? Keynote speaker at the 14th Annual American Academy of Orthopaedic Manual Physical Therapists Conference (Pain: from Science to Solution), Seattle, WA
- National Presentations – Refereed Paper or Poster
- February 2016 Clinical research network year 3 update. Platform presentation at Combined Sections Meeting, Orthopaedic Section, American Physical Therapy Association, Anaheim, CA
- February 2015 A red flag screening tool for orthopaedic physical therapy settings: results from the optimal screening for prediction of referral and outcome (OSPRO) cohort. Platform presentation at Combined Sections Meeting, Orthopaedic Section, American Physical Therapy Association, Indianapolis, IN

- February 2015 Clinical research network year 2 update. Platform presentation at Combined Sections Meeting, Orthopaedic Section, American Physical Therapy Association, Indianapolis, IN
- February 2014 Prospective assessment of upper extremity ROM, strength, function, and quality of life in women diagnosed with breast cancer. Platform presentation at Combined Sections Meeting, Oncology Section, American Physical Therapy Association, Las Vegas, NV
- February 2014 Clinical research network year 1 update. Platform presentation at Combined Sections Meeting, Orthopaedic Section, American Physical Therapy Association, Las Vegas, NV
- January 2013 Catastrophizing predicts resting pain following exercise-induced shoulder injury, but experimental responses predict pain during activity. Platform presentation at Combined Sections Meeting, Orthopaedic Section, American Physical Therapy Association, San Diego, CA
- May 2012 Genetic and psychological risk factors are associated with pain and disability in an experimentally induced acute shoulder pain model. Poster presentation at the 31st Annual Scientific Meeting of the American Pain Society, Honolulu, HI
- February 2012 First episode of self-reported low back pain during military service: predictors from an inception cohort. Platform presentation at Combined Sections Meeting, Orthopaedic Section, American Physical Therapy Association, Chicago, IL
- February 2011 Psychometric analysis of the Tampa Scale for Kinesiophobia in patients with ACL reconstruction. Platform presentation at Combined Sections Meeting, Orthopaedic Section, American Physical Therapy Association, New Orleans, LA
- February 2011 Investigation of fear-avoidance beliefs and clinical outcomes across multiple anatomical locations. Platform presentation at Combined Sections Meeting, Orthopaedic Section, American Physical Therapy Association, New Orleans, LA
- February 2010 Patient satisfaction with behavioral physical therapy interventions: secondary analysis from a randomized clinical trial (NCT00373867). Platform presentation at Combined Sections Meeting, Orthopaedic Section, American Physical Therapy Association, San Diego, CA
- May 2009 Psychometric properties of the fear of daily activities questionnaire (FDAQ) for patients with low back pain. Poster presentation at the 29th Annual Scientific Meeting of the American Pain Society, San Diego, CA
- February 2009 Psychosocial education improves low back pain beliefs: results from a cluster randomized clinical trial (NCT00373009). Platform presentation at Combined Sections Meeting, Orthopaedic Section, American Physical Therapy Association, Las Vegas, NV
- October 2008 Immediate effects of neural mobilization on pain perception in individuals experiencing carpal tunnel syndrome: preliminary findings of a randomized trial. Paper presentation at the Annual Meeting for the American Society of Hand Therapists, Boston, MA

- May 2008 Biopsychosocial influence on induced shoulder pain. Poster presentation at the 28th Annual Scientific Meeting of the American Pain Society, Tampa, FL
- February 2008 Behavioral interventions for sub-acute low back pain. Platform presentation at Combined Sections Meeting, Orthopaedic Section, American Physical Therapy Association, Nashville, TN
- May 2007 Evidence for biopsychosocial factors' influence on shoulder pain. Poster presentation at the 27th Annual Scientific Meeting of the American Pain Society, Washington, DC
- February 2007 Elevated fear-avoidance beliefs for subjects participating in physical therapy clinical trials. Platform presentation at the Combined Sections Meeting, Orthopaedic Section, American Physical Therapy Association, Boston, MA
- May 2006 Pain related fear influences pain, physical impairment, disability, and kinesiophobia following delayed onset muscle soreness at the shoulder. Paper presentation at the 26th Annual Scientific Meeting of the American Pain Society, San Antonio, TX
- February 2006 Immediate effect of spinal manipulation on temporal summation of pain. Platform presentation at the Combined Sections Meeting, Orthopaedic Section, American Physical Therapy Association, San Diego, CA
- March 2005 Does experimental pain sensitivity contribute to reports of clinical pain intensity and disability? Poster presentation at the 25th Annual Scientific Meeting of the American Pain Society, Boston, MA
- March 2005 Psychological influence on central sensitization of pain for patients with chronic low back pain. Poster presentation at the 25th Annual Scientific Meeting of the American Pain Society, Boston, MA
- February 2005 Sex differences in response to physical therapy interventions for low back pain. Poster presentation at the Combined Sections Meeting, Orthopaedic Section, American Physical Therapy Association, New Orleans, LA
- February 2004 Symptom centralization and fear-avoidance beliefs as prognostic factors for low back pain. Platform presentation at the Combined Sections Meeting, Orthopaedic Section, American Physical Therapy Association, Nashville, TN
- October 2003 A preliminary investigation of patient-centered outcomes in patients with chronic pain. Paper presentation at the National Congress of Rehabilitation Medicine – American Society of Neurorehabilitation Joint Conference, Tucson, AZ
- February 2003 The effect of a fear-avoidance based intervention for patients with acute low back pain, four week results from a randomized clinical trial. Platform presentation at the Combined Sections Meeting, Orthopaedic Section, American Physical Therapy Association, Tampa Bay, FL
- February 2001 A comparison of fear avoidance beliefs in patients with lumbar spine pain and patients with cervical spine pain. Platform presentation at the Combined

Sections Meeting, Orthopaedic Section, American Physical Therapy Association, San Antonio, TX

National Presentations – Seminar

- June 2015 Opioids vs. physical therapy: should physical therapy be the first option or chronic pain? Rothstein Roundtable session at the NEXT meeting, American Physical Therapy Association, Nashville, TN
- June 2015 Psychologically informed physical therapy practice: focus on low back pain. Pre-conference educational session at the NEXT meeting, American Physical Therapy Association, National Harbor, MD
- February 2015 Transitioning from acute to chronic pain: predictors and prevention. Educational session at the Combined Sections Meeting, Orthopaedic Section, American Physical Therapy Association, Indianapolis, IN
- May 2013 Reducing disability from low back pain: highlights from primary, secondary, and tertiary prevention. Symposium (moderator and speaker) at the American Pain Society 32nd Annual Scientific Meeting, New Orleans LA
- January 2013 Research and clinical practice updates: low back pain ICF CPG and Introduction to Research Network Program Initiative. Invited speaker for educational programming at Combined Sections Meeting, Orthopaedic Section, American Physical Therapy Association, San Diego CA
- January 2013 The “business” of research and negotiating your faculty position. Invited speaker for educational programming at Combined Sections Meeting, Section on Research, American Physical Therapy Association, San Diego CA
- January 2013 Writing with the Editors. Participant in roundtable session at Combined Sections Meeting, Section on Research, American Physical Therapy Association, San Diego CA
- September 2012 An update on psychologically informed physical therapy. Invited speaker at Alumni Day (Pain: Mechanisms and Clinical Applications) Washington University School Medicine Program in Physical Therapy, St. Louis MO
- May 2012 The spectrum of low back pain: from cells to health care systems. Symposium (moderator and speaker) at the American Pain Society 31st Annual Scientific Meeting, Honolulu, HI
- October 2011 Psychologically informed practice for low back pain. Pre-conference breakout session at the 2011 Impairment without Disability: Fourth Annual Conference, Duluth, MN
- June 2011 CPR: Dead or alive? Oxford Debate, American Physical Therapy Annual Conference & Expo, National Harbor, MD
- April 2011 Comparison of graded exercise and graded exposure clinical outcomes for patients with chronic low back pain. Author in the Room Presentation, Evidence in Motion, Online continuing education format

- February 2011 Vitalizing practice through research and research through practice. Educational programming at Combined Sections Meeting, Orthopaedic Section, American Physical Therapy Association, New Orleans, LA
- February 2011 How to design RCT's: real world considerations. Educational programming at Combined Sections Meeting, Orthopaedic Section, American Physical Therapy Association, New Orleans, LA
- February 2011 Enhancing clinical practice through psychosocial perspectives in the management of low back pain. Educational programming at Combined Sections Meeting, Orthopaedic Section, American Physical Therapy Association, New Orleans, LA
- February 2010 Bridging science and clinical practice: you can be that scientist! Educational programming at Combined Sections Meeting, Section on Research, American Physical Therapy Association, San Diego, CA
- February 2010 Factors that influence musculoskeletal pain: fatigue, sex, personality, psychology, and genetics. Educational programming at Combined Sections Meeting, Section on Research, American Physical Therapy Association, San Diego, CA
- February 2009 The business of balancing research, service, and teaching: a program for junior faculty. Educational programming at Combined Sections Meeting, Section on research, American Physical Therapy Association, Las Vegas, NV
- February 2009 Fear-avoidance behavior: state of art review. Educational programming at Combined Sections Meeting, Section on Education, American Physical Therapy Association, Las Vegas, NV
- February 2009 Bridging the gap...What to do when your student knows more about EBP than you do! Educational programming at Combined Sections Meeting, Section on Education, American Physical Therapy Association, Las Vegas, NV
- October 2008 Individualized management of pain: current examples and future direction. Breakout session at the 14th Annual American Academy of Orthopaedic Manual Physical Therapists Conference (Pain: from Science to Solution), Seattle, WA
- October 2008 Psychological influence on musculoskeletal pain: a clinical update for the practicing manual therapist. Pre-conference workshop at the 14th Annual American Academy of Orthopaedic Manual Physical Therapists Conference (Pain: from Science to Solution), Seattle, WA
- October 2008 So the student asked about odds ratios (again): interpretation and application of evidence based practice for the practicing clinician. Pre-conference workshop at the 14th Annual American Academy of Orthopaedic Manual Physical Therapists Conference (Pain: from Science to Solution), Seattle, WA
- October 2008 An update on pain perception for the practicing clinician. Invited speaker at the Annual Meeting for the American Society of Hand Therapists, Boston, MA

- September 2008 Screening for psychosocial factors: Issues for rehabilitation practitioners. Continuing education program via web. Expert Clinical Benchmarks, King of Prussia, PA
- February 2008 Becoming a physical therapy researcher or so I finished my PhD what do I do? Educational programming at Combined Sections Meeting, Section on Research, American Physical Therapy Association, Nashville, TN
- January 2008 Psychological influence on low back pain. Continuing education program via teleconference. Optum Health (United Health Group), Minneapolis, MN
- July 2005 Psychological influence in acute low back pain: Identification and management of the patient with elevated fear-avoidance beliefs. Educational session at the University of Pittsburgh Medical Center, Pittsburgh, PA
- March 2004 A clinical research update on a treatment based classification system. Research workshop and update for clinical staff of Westmoreland Regional Hospital, Greensburg, PA.
- October 2002 Current management of the lumbar spine. Clinical research update for alumni, West Virginia University, School of Medicine, Division of Physical Therapy, Morgantown, WV
- July 2000 Management of the patient with low back pain using a treatment-based classification approach. Presented to clinical faculty at Columbia University, New York, NY

Regional Presentations – Invited Seminar

- May 2015 Psychological informed physical therapy practice: pragmatic application for low back pain. Educational session at the Centers for Rehab Services/University of Pittsburgh, Pittsburgh, PA
- March 2015 Psychological informed physical therapy practice: pain science to practice. Educational session at the Florida Physical Therapy Association Annual Meeting, Orlando FL
- December 2011 Update on chronic musculoskeletal pain for physical therapists. Educational session at Intermountain Health Care, Salt Lake City, UT
- October 2011 Psychological screening for individuals with low back pain: Methods, measures, and collaborative efforts. Presentation at Brooks Rehabilitation 2011 Annual Research Day, Jacksonville FL
- September 2011 Beyond fear: Other psychosocial factors with relevance to the management of patients with musculoskeletal pain. Preconference education course at the Florida Physical Therapy Association Annual Conference, Orlando FL
- February 2011 Biopsychosocial influence on induced shoulder pain. Educational session at The 8th Annual Teton Hand and Extremity Conference, Jackson Hole, WY

- February 2011 Effects of neural mobilization on pain perception in individuals experiencing carpal tunnel syndrome. Educational session at The 8th Annual Teton Hand and Extremity Conference, Jackson Hole, WY
- January 2011 Clinical update: psychological influence on pain perception in the upper extremity. Educational session at The 8th Annual Teton Hand and Extremity Conference, Jackson Hole, WY
- October 2010 A clinical update on the science of pain perception. Educational session at the APTANJ and NYPTA Annual Physical Therapy Conference, Atlantic City, NJ
- October 2010 A review of evidence based practice for the practicing clinician. Educational session at the APTANJ and NYPTA Annual Physical Therapy Conference, Atlantic City, NJ
- March 2009 An update on pain perception for the practicing clinician. Educational session at the Florida Physical Therapy Association Spring Conference, Orlando, FL
- April 2007 Low back classification systems. Continuing education program at the Department of Athletic Training and Physical Therapy, University of North Florida, Jacksonville, FL
- March 2005 Psychological influence in acute low back pain: identification and management of the patient with elevated fear-avoidance beliefs. Educational session at the Florida Physical Therapy Association Spring Conference, Orlando, FL
- March 2001 Relationship between fear avoidance beliefs and spine pain. Graduate research seminar, West Virginia University, Department of Clinical Psychology, Morgantown, WV

Local Presentations – Invited Seminar

- January 2009 Psychosocial interventions for low back pain. Rehabilitation Research Seminar Series (supported by NIH T-32), University of Florida, Gainesville, FL
- September 2007 Rehabilitation of the lumbar spine: An evidence-based multidisciplinary approach. Continuing education program from Shands Rehab Centers Conference Series, Gainesville, FL
- September 2006 Biopsychosocial factors' influence on shoulder pain. Rehabilitation Research Seminar Series (supported by NIH T-32), University of Florida, Gainesville, FL
- January 2006 Clinical Update on the management of low back pain. Continuing education program at the Department of Physical Therapy, University of Florida, Gainesville, FL
- October 2005 Psychological influence in acute low back pain: Identification and management of the patient with elevated fear-avoidance beliefs. Educational session at the Shands Medical Center, Gainesville, FL
- September 2005 Neuronal plasticity of pain: Response to rehabilitation interventions. Poster presentation at the Neuromuscular Plasticity Symposium, University of Florida, Gainesville, FL

- May 2005 The influence of sex, personality, and coping style on the pain drawing. Poster presentation at 4th Annual Pain Research Day, Comprehensive Center for Pain Research, University of Florida, Gainesville, FL
- October 2004 The influence of psychological factors on central sensitization for patients with chronic low back pain. RORC-BRRC-Brooks Center Monthly Research Seminar (No. 29). Gainesville, FL
- June 2004 Evidence-based principles for the practicing clinician. Continuing education workshop for clinical staff of Shands Rehabilitation Hospital, Gainesville, FL
- April 2004 Anxiety and anxiety sensitivity during experimental pain response. Poster presentation at 3rd Annual Pain Research Day, Comprehensive Center for Pain Research, University of Florida, Gainesville, FL
- April 2003 Sex differences in pain anchors – investigation of “most intense” pain events and common pain events. Poster presentation at Pain Research Day, Comprehensive Center for Pain Research, University of Florida, Gainesville, FL
- March 2003 Future disability from work-related, acute low back pain: the influence of fear-avoidance beliefs. Rehabilitation Research Seminar Series, University of Florida, Gainesville, FL
- December 1999 Introduction to a treatment-based classification system for acute, low back pain. Presented to physical therapy students at Slippery Rock University, Slippery Rock, PA

Graduation or White Coat

- March 2012 Keynote speaker at the Clinical Pathways Ceremony. Doctor of Physical Therapy Class of 2013, West Virginia University, School of Medicine, Division of Physical Therapy.
- May 2016 Leader in Physical Therapy speaker at the Doctor of Physical Therapy graduation ceremony. Department of Physical Therapy, The Ohio State University

Teaching Experience

Brooks Rehabilitation Residency Program

Course Coordinator (2010 – present)
Chronic Musculoskeletal Pain (12 contact hours)

Course Coordinator (2010 – 2011)
Review of Evidence Based Practice (8 contact hours)

University of Florida

Course Coordinator (2005 - present)
Evidence Based Practice I (3 credits)
Evidence Based Practice III (2 credits)
Course Coordinator (2005 – 2010, 2012 - 2013)
Evidence Based Practice II (3 credits)

Course Coordinator (2002 - 2006)
Development of a Case Study I (2 Credits)
Development of a Case Study II (2 Credits)
Scientific Basis of Physical Therapy Practice (2 Credits)

Guest Lecture (2002 - present)
Orthopedic Physical Therapy
Differential Diagnosis

Arcadia University

Lecturer (2005)
Clinical Decision Making

University of Pittsburgh

Course Coordinator (2002)
Introduction to an Evidence-Based Approach to the Rehabilitation Sciences (3 credits)

Lecturer (1997 – 2002)
Human Anatomy, Musculoskeletal PT I, Musculoskeletal PT II, Musculoskeletal PT III, and Evidence-Based Practice III

Teaching Assistant (1996 – 2001)
Human Anatomy, Musculoskeletal PT I, Musculoskeletal PT II, Musculoskeletal PT III, Evidence-Based Practice I, and Evidence-Based Practice II

Clinical Instructor (1996 – 2000)
Full and part-time clinical affiliations in acute medicine, inpatient orthopaedic, inpatient rehabilitation, and outpatient orthopaedic settings

Advisement

Training Grants - Ongoing

Title: Rehabilitation Research Career Development Program (PI: Ottenbacher K)
Role: Lead Mentor
Type: K12HD055929-01
Agency: National Institutes of Health
Participation: 2008 – present

Title: Integrative and Translational Training in Pain Research (PI: Yeziarski RB)
Role: Program Faculty
Type: 5T32NS045551
Agency: National Institutes of Health
Participation: 2006 – present

Title: Interdisciplinary Training in Rehabilitation and Neuromuscular Plasticity (PI: Vandeborne K)
Role: Faculty Preceptor
Type: T32HD043730
Agency: National Institutes of Health

Participation: 2005 – present

Training Grants - Completed

Title: Neurobiological Mechanisms of Body Based Interventions for Musculoskeletal Pain (PI: Bishop MD)
Role: Collaborator
Type: K01AR054331
Agency: National Institutes of Health
Participation: 2008 – 2014

Completed Doctoral Committees: Chair

Student: Corey Simon (University of Florida, 2014)
Title: Age differences in pain sensitivity and response to transcutaneous electrical nerve stimulation
College: Public Health and Health Professions (Rehabilitation Science)

Student: Rogelio Coronado (University of Florida, 2014)
Title: Cervical and shoulder manipulative therapy effects on pain sensitivity
College: Public Health and Health Professions (Rehabilitation Science)

Student: Jason Beneciuk (University of Florida, 2011)
Title: Investigation of the STarT Back Screening Tool in Outpatient Physical Therapy Settings
College: Public Health and Health Professions (Rehabilitation Science)

Student: Carolina Valencia Montedonico (University of Florida, 2011)
Title: Investigation of Central Pain Processing in Post-Operative Shoulder Pain
College: Public Health and Health Professions (Rehabilitation Science)

Student: Joel E. Bialosky (University of Florida, 2008)
Title: Mechanisms of Manual Therapy
College: Public Health and Health Professions (Rehabilitation Science)

Primary Doctoral Mentor

Trevor Lentz, Graduate Student, Rehabilitation Science, 2013 – current
Katie Butera, Graduate Student, Rehabilitation Science, 2014 – current

Completed Doctoral Committees: University of Florida Committee Member

Student: Fredy Mora Solis (University of Florida, 2016)
Chair: Mark D. Bishop, PhD
Title: The change in activity following acute exercise induced low back pain
College: Public Health and Health Professions (Rehabilitation Science)

Student: Kristen Sanderson Springer (University of Florida, 2015)
Chair: Michael Robinson, PhD
Title: The development and assessment of a new technology for treating chronic low back pain patients from a fear-avoidance model
College: Public Health and Health Professions (Clinical and Health Psychology)

Student: Chao-Jung Hsu (University of Florida, 2014)
Chair: Terese L. Chmielewski
Title: Impairments and rehabilitation outcomes in patients with meniscectomy for traumatic meniscal tears

College: Public Health and Health Professions (Rehabilitation Science)

Student: Ying He (University of Florida, 2014)

Chair: Samuel S. Wu

Title: On statistical inference of two adaptive clinical trial designs

College: Public Health and Health Professions (Biostatistics)

Student: Charles Wysaw Gay (University of Florida, 2014)

Chair: Mark D. Bishop

Title: Functional connectivity changes within the pain processing and modulatory networks following exercise-induced muscular injury and manual therapy

College: Public Health and Health Professions (Rehabilitation Science)

Student: Meryl Joseph Alappattu (University of Florida, 2013)

Chair: Mark D. Bishop

Title: Peripheral and central factors in female pelvic pain

College: Public Health and Health Professions (Rehabilitation Science)

Student: Maggie Elizabeth Horn (University of Florida, 2013)

Chair: Mark D. Bishop

Title: Clinical outcomes, healthcare utilization, and costs in patients with neck pain utilizing physical therapy

College: Public Health and Health Professions (Rehabilitation Science)

Student: Nkaku Robert Kisaalita (University of Florida, 2013)

Chair: Michael E. Robinson

Title: Placebo acceptability in patients with chronic musculoskeletal pain: the effects of a mechanism-based educational intervention

College: Public Health and Health Professions (Clinical and Health Psychology)

Student: Daniela Roditi (University of Florida, 2013)

Chair: Michael E. Robinson

Title: Deception: Is it a necessary component of the placebo response? An empirical investigation of the role of deception in placebo analgesia

College: Public Health and Health Professions (Clinical and Health Psychology)

Student: Kelly A. Larkin (University of Florida, 2012)

Chair: Paul Borsa, PhD

Title: Age-associated modulation of motor control and skeletal muscle fatigue by near-infrared light therapy

College: Health and Human Performance (Applied Physiology and Kinesiology)

Student: Anne N. Nisenzon (University of Florida, 2011)

Chair: Michael E. Robinson

Title: The role of anger in screening for prognostic risk factors and sub-grouping low back pain patients

College: Public Health and Health Professions (Clinical and Health Psychology)

Student: Jeffrey J. Parr (University of Florida, 2010)

Chair: Paul Borsa, PhD

Title: Predicting physical impairment and recovery following an exercise-induced shoulder injury

College: Health and Human Performance (Applied Physiology and Kinesiology)

Student: Bongsam Choi (University of Florida, 2010)
Chair: Craig A. Velozo, PhD
Title: The importance of precisely measuring disability for back pain
College: Public Health and Health Professions (Rehabilitation Science)

Student: Lauren A. Stutts (University of Florida, 2009)
Chair: Michael Robinson, PhD
Title: Investigating patient and healthcare student characteristics on pain assessment using virtual patient technology
College: Public Health and Health Professions (Clinical and Health Psychology)

Student: Erin M. O'Brien (University of Florida, 2008)
Chair: Michael Robinson, PhD
Title: Sleep disturbance in chronic pain patients
College: Public Health and Health Professions (Clinical and Health Psychology)

Student: Adam T. Hirsh (University of Florida, 2007)
Chair: Michael Robinson, PhD
Title: Investigating patient and provider influences on the assessment and treatment of pain: a novel virtual patient technology application
College: Public Health and Health Professions (Clinical and Health Psychology)

Student: Geoffrey C. Dover (University of Florida, 2005)
Chair: Paul Borsa, PhD
Title: TENS treatment for pain relief and improved function following induced shoulder micro-injury
College: Health and Human Performance (Applied Physiology and Kinesiology)

Doctoral Committee Service Outside of University of Florida

Student: Victoria Madden (University of South Australia, 2016)
Supervisor: G. Lorimer Moseley
Title: Classical conditioning and pain
Role: Examiner

Student: Maxi Maciak (University of Alberta, 2015)
Supervisor: Douglas Gross
Title: Bedside matters: a conceptual framework of the therapeutic relationship in physiotherapy
Role: Examiner

Student: Mark Jon Catley (University of South Australia, 2014)
Supervisor: G. Lorimer Moseley
Title: Exploring tactile acuity deficits in people with chronic back pain
Role: Examiner

Student: David Charles Jones (University of Alberta, 2013)
Supervisors: Linda Carroll, Douglas Gross, Don Voaklander, Ian Colman
Title: Work, injury, and depression: the influence of work status on depressive symptoms for those recovering from musculoskeletal injury
Role: Examiner

Student: Rafael Zambelli Almeida Pinto (University of Sydney, 2013)
Supervisors: Chris Maher, Paulo Ferreira, Manuela Ferreira
Title: Back pain: management and mechanisms

Role: Examiner

Student: Jorge Patricio Fuentes Contreras (University of Alberta, 2013)
Supervisors: Douglas Gross, David Magee, Sharon Warren, and Bruce Dick
Title: Therapeutic contextual factors in physiotherapy: magnitude, mechanisms and contributors of placebo mediated analgesia in chronic low back pain
Role: Reader

Student: William Hanney (Nova Southeastern University, 2011)
Supervisors: Joshua Cleland and Morey Kolber
Title: Development of a clinical prediction rule to identify patients with neck pain that may benefit from education and exercise
Role: Committee member

Student: Luciola Da Cunha Menezes Costa (University of Sydney, 2011)
Supervisors: Chris Maher, James McAuley, Mark Hancock
Title: The course of low back pain and outcome measures for musculoskeletal condition
Role: Examiner

Student: Darren Calley (University of Maryland School of Medicine, 2009)
Supervisors: Roy Bechtel, Karen Gordes
Title: Screening for fear avoidance beliefs by physical therapists managing low back pain
Role: Final project mentor

Completed Undergraduate Honors Theses (Primary Faculty Mentor)

Student: Lindsay Orr (University of Florida, 2014)
Title: Physical activity and pain sensitivity
College: Public Health and Health Professions

Student: Anthony Lauretta (University of Florida, 2008)
Title: Neural mobilization and its effects on elbow range of motion and sensory reporting: a preliminary analysis
College: Public Health and Health Professions

Student: Kacie Smith (University of Florida, 2008)
Title: The influence of fear-avoidance specific variables on neural mobilization outcomes
College: Public Health and Health Professions

Student: Lauren A. Gates (University of Florida, 2007)
Title: Impact of psychological factors and instructional sets on pain expectations
College: Public Health and Health Professions

Student: Valdora L. Martelli (University of Florida, 2007)
Title: Relationship between cavitation and hypoalgesia after spinal manipulation therapy
College: Public Health and Health Professions

Student: Jessica S. Neff (University of Florida, 2007)
Title: COMT gene diplotypes self-report psychological questionnaires in two populations
College: Public Health and Health Professions

Student: Ryland J. Galmish (University of Florida, 2006)
Title: The effect of rumination on coping style, pain intensity, and pain tolerance

College: Public Health and Health Professions

Service

NIH Grant Review

- 2015 Chair, Complex Trials ZAT1 HS(22), NCCIH
- 2015 Reviewer, Special Emphasis Panel ZAT1SM-36, NCCAM
- 2014 Reviewer, Special Emphasis Panel BBBP-T59, NCCAM
- 2013 Mail Reviewer for SBIR application
- 2012 Reviewer, Special Emphasis Panel ZAT1 PK (21) – Clinical Science, NCCAM
- 2011 Ad Hoc Reviewer, Clinical Science, NCCAM
- 2010 Reviewer, Special Emphasis Panel ZAR1 CHW M2 1, Clinical Trials Review, NIAMS
- 2010 Reviewer, Special Emphasis Panel ZAT1 LD (35) – Clinical Science, NCCAM
- 2009 Reviewer, Special Emphasis Panel ZAT1 LD (32 and 34) – Clinical Science, NCCAM
- 2009 Reviewer, Special Emphasis Panel ZAT1 PK (03 and 05) – Preclinical Science, NCCAM
- 2008 Reviewer, Special Emphasis Panel ZAT1 PK (02) – Preclinical Science, NCCAM
- 2008 Reviewer, Special Emphasis Panel ZRG1 CFS-E (01) – Chronic Fatigue and Pain, CSR

Other Grant Review

- 2012 Invited external grant reviewer for University of Wisconsin-Milwaukee Research Growth Initiative
- 2011 Invited external grant reviewer for University of Wisconsin-Milwaukee Research Growth Initiative
- 2010 Invited external grant reviewer for University of Wisconsin-Milwaukee Research Growth Initiative
- 2010 Invited external grant reviewer for Alberta Innovates – Health Solutions (formerly Alberta Heritage Foundation)
- 2009 Invited external grant reviewer for University of Wisconsin-Milwaukee Research Growth Initiative
- 2008 Invited external grant reviewer for Canadian Institutes of Health Research
- 2007-2012 Invited external reviewer for grants submitted to Orthopaedic Section, American Physical Therapy Association
- 2004 Invited external grant reviewer for ZonMw (Netherlands Organisation for Health Research and Development)
- 2004 Invited external grant reviewer for Arthritis Research Campaign project grant (UK)

Review for Scholarly Journals

- Referee *Phys Ther, J Orthop Sports Phys Ther, J Pain, Clin J Pain, Pain, Eur J Pain, Pain Med, Arch Phys Med Rehabil, Arthritis Care Res, Behav Res Ther, Physiother Can, J Rehabil Res Dev, BMC Musculoskelet Disord, Physiother, Physiother Theor Pract, and Journal of Musculoskeletal Medicine.*
- 2006-2007 Invited reviewer for American Pain Society/American College of Physicians Clinical Guidelines for the Management of Low Back Pain

Editorial Board for Scholarly Journals

2010-2012 Associate Editor (Rehabilitation Section), *Pain Med*
 2014-present Editorial Board Member, *J Pain*
 2009-2015 Editorial Board Member, *Phys Ther*
 2007-present International Editorial Review Board, *J Orthop Sports Phys Ther*
 2016- present Contributing Editor, *Phys Ther*

Professional Activities and Service

2016 – present Advisory Council Member, NCCIH
 2014-2015 Co-Chair Low Back Pain Group, American Pain Society/ACTION Pain Taxonomy Project
 2011-2013 Member, Scientific Program Committee, American Pain Society
 2011-2013 Co-Chair, Psychosocial Special Interest Group, American Pain Society
 2010 Panel Chair, Assessment Objectives for Physical Therapy Curriculum, International Association for the Study of Pain
 2010 Invited Participant, Roundtable on Psychosocial and Behavioral Therapies for Musculoskeletal and Rheumatic Disease Outcomes, NIAMS/NIH
 2009-2010 Hooked on Evidence Advisory Board Member, American Physical Therapy Association
 2009 Member, Awards Committee, American Pain Society
 2009 Abstract Review for Military Health Research Forum, Congressionally Directed Medical Research Programs
 2008-2013 Faculty Member, Musculoskeletal Pain & Analgesia, Faculty of 1000 Medicine
 2008-2011 Member, Awards Committee, American Physical Therapy Association’s Section on Research
 2008-2009 At Large Member, Nominating Committee, American Pain Society
 2007-2012 Member, International Classification of Function (Low Back Workgroup), Orthopaedic Section, American Physical Therapy Association
 2003-present Abstract Reviewer for Combined Sections Meeting Submissions, Orthopedic Section
 2003-2006 Section on Research Accuracy Review, Hooked on Evidence Initiative, APTA
 2003 Moderator, Research Platform Session A, Orthopedic Section, Combined Sections Meeting, APTA
 1996-1998 Admissions Committee Member, Department of Physical Therapy, University of Pittsburgh
 1995-2001 Medical Volunteer, UPMC – City of Pittsburgh Marathon
 1992-1994 Class Secretary, Physical Therapy - Class of 1994, WVU

Tenure/Promotion Review

2013 University of Pittsburgh, Medical University of South Carolina
 2011 Marquette University, University of Utah
 2010 University of Iowa
 2010 Virginia Commonwealth University
 2010 University of Colorado

University Service

2014 – 2015 Master Mentor, Training and Professional Development Program – Mentor Academy (Clinical and Translational Science Institute)
 2013 – 2014 Academic Track, Advanced Leadership for Academics and Professionals (Leadership Development at the University of Florida)
 2012 – 2014 Member, UFHealth – PPHP Summit Committee
 2011 Member, Search Committee for Orthopaedic & Rehabilitation Department Chair

- 2005 Presenter, Minority Association of Pre-Health Students (MAPS) 4th Annual Research/Enrichment Forum
- 2004 – 2013 Member, University of Florida Minority Mentor Program

College Service

- 2012 – 2014 Member, Innovative Training Models and Incentives Committee
- 2009 – 2012 Member, Research Committee
- 2008 – 2009 Chair, Research Committee
- 2007 – 2009 Member, Grant Writing Workshop
- 2007 Member, Shared Governance Committee
- 2006 Member, Chair Evaluation Committee
- 2005 – 2012 Reviewer, Research Opportunity Incentive Funds and Brooks Health Grants
- 2005 Member, PPHP Alumni of Year Committee
- 2004 Member, Search Committee for Rehabilitation Counseling Department Chair

Departmental Service

- 2014 – 2015 Chair, Faculty Development Committee
- 2014 – 2015 Member, PhD Planning Committee
- 2013 Chair, DPT Clinical Faculty Search Committees (2)
- 2012 – 2013 Chair, DCE Search Committee
- 2011 – 2013 Member, Education Clinic Committee
- 2010 – 2013 Chair, Clinical Excellence Committee
- 2010 – 2012 Chair, Rehabilitation Science Doctoral program Committee
- 2008 – 2009 Chair, Rehabilitation Science Task Force
- 2008 – 2010 Member, Rehabilitation Science Conference Task Force
- 2008 – 2010 Member, Dual Degree Task Force
- 2007 Member, Search Committee for Clinical Assistant Professor
- 2006 Chair, Academic Progression Committee
- 2005 – 2010 Member, Rehabilitation Science Doctoral program Committee
- 2005 – 2012 Chair, Professionalism Committee
- 2004 – 2008 Member, Alumni Relations Committee

Community Service

- 2014 - present Volunteer Coach, Upwards Flag Football (Gainesville, FL)
- 2009 – 2014 Volunteer, Stephen Foster Elementary (Gainesville, FL)
- 2005 – 2009 Volunteer, W.W. Irby Elementary (Alachua, FL)
- 2004 – 2007 Youth Sports Coach, YMCA of Gainesville

Professional Memberships

- 2016-present Member, North Carolina Physical Therapy Association
- 2009-present Member, International Association for the Study of Pain
- 2005-present Member, American Pain Society
- 2002-present Member, Florida Physical Therapy Association
- 2000-present Member, Research Section, American Physical Therapy Association
- 1997-present Member, Orthopaedic Section, American Physical Therapy Association
- 1992-present Member, American Physical Therapy Association
- 1995-2002 Member, Pennsylvania Physical Therapy Association

Consultation Outside the University

Program Review

University of Utah (Salt Lake City, UT)

Textbook Review

F.A. Davis Company (Philadelphia, PA)
Lippincott Williams & Wilkins

Medial Record Review

Wicker, Smith, O'Hara, McCoy, Graham & Ford, P.A. (West Palm Beach, FL)
Hunter, Williams & Lynch, P.A. (Coral Gables, FL)
Fowler, White, Boggs, Banker Attorneys at Law (Tampa, FL)
Wallace B. McCall Law Offices (Jupiter, FL)
Weekley, Schulte, Valdes Attorneys at Law (Tampa, FL)
Leon & Berg, PA Attorneys at Law (Tampa, FL)

Healthcare Advisement

Gerson Lehrman Group Council Member
Expert Clinical Benchmarks, LLC (King of Prussia, PA)