



DIVISION OF THERAPY SERVICES

RESEARCH ANNUAL REPORT: FISCAL YEAR 2014

The accomplishments outlined in this report showcase the work of our dedicated and talented therapists who strive on a daily basis to contribute new knowledge to the field of rehabilitation. In fiscal year 2014, research and educational presentations were presented by forty-four therapists at nineteen professional conferences at the state, national and international levels. Five articles were published in peer-reviewed journals and multiple awards and special recognition received. Congratulations to our therapists an extremely successful fiscal year 2014!

Conference Presentations:

<u>Project Title</u>	<u>Staff Involvement (presenting authors underlined)</u>	<u>Type of Presentation</u>
<u>Shoulder Center of Kentucky 16th Annual Shoulder Symposium, The Rotator Cuff: Do We Really Know What We are Treating? July 30-31, 2013; Lexington, Kentucky</u>		
Rehabilitation following Rotator Cuff Repair: Standard vs. Delayed	<u>Brian Leggin PT, DPT, OCS</u>	Education Session
Outcome following Nonoperative Rehabilitation of Rotator Cuff Disease	<u>Brian Leggin PT, DPT, OCS</u>	Education Session
<u>The Mid-Atlantic Shoulder and Elbow Society Meeting September 20, 2013; Philadelphia, PA</u>		
The Stiff Unstable Elbow	<u>Laura Walsh MS, OTR/L, CHT</u>	Panel Discussion
Rehab Challenges After Rotator Cuff Surgery	<u>Marty J. Kelley, PT, DPT, OCS</u>	Moderated Panel Discussion

<u>World Parkinson Congress</u> October 2-4, 2013; Montreal, Canada		
A Novel Approach to Testing Freezing of Gait in Patients with Parkinson's Disease: the Clover Test	<u>Heather Cianci PT, MS, GCS</u> <u>Joellyn Fox PT, DPT</u>	Poster Presentation
Using Timed Tasks to Determine Change after LSVT® BIG Treatment in Three Patients with Young Onset Parkinson's Disease	<u>Heather Cianci PT, MS, GCS</u> <u>Joellyn Fox PT, DPT</u>	Poster Presentation
<u>2013 APTA Educational Leadership Conference</u> October 4-6, 2013; Portland, Oregon		
Integrating Management Principles and Skills into a Final Physical Therapy Clinical Education Experience	<u>Nicole Dugan PT, DPT, MSOD, CLT-LANA</u> <u>Tiffany Prince PT, DPT, OCS</u> Eric Folkins PT, DPT, OCS	Oral Presentation
<u>American Society of Shoulder & Elbow Therapists (ASSET) Conference</u> October 12-15, 2013; Las Vegas, Nevada		
A Comparison of Range of Motion Strength and Function in Patients with Rotator Cuff Tears with a Healthy Population	<u>Brian Leggin PT, DPT, OCS</u> Marty J. Kelley PT, DPT, OCS T. Buck, L. Clark, A. Gizzi J. Jablonski, B. Murray M. Niro-Zazworskey	Oral Presentation
Long-Term Outcome Following Non-Operative Management of Rotator Cuff Tears	<u>Brian Leggin PT, DPT, OCS</u> T. Buck, A. Gizzi J. Jablonski, L. Clark, B. Murray M. Niro-Zazworskey	Oral Presentation
Outcome Following Non-Operative Management of Rotator Cuff Tears	<u>Brian Leggin PT, DPT, OCS</u> Marty J. Kelley PT, DPT, OCS T. Buck, L. Clark, A. Gizzi J. Jablonski, B. Murray M. Niro-Zazworskey	Oral Presentation
<u>2013 American Academy of Orthopaedic Manual Physical Therapy (AAOMPT) Annual Conference</u> October 16-20, 2013; Cincinnati, Ohio		
Multimodal Treatment of Brachial Plexus Palsy in a Patient with Clavicular Fracture	<u>Michael Karl PT, DPT, OCS</u>	Poster Presentation

<u>36th American Society of Hand Therapy (ASHT) Annual Meeting</u> October 24-27, 2013; Chicago, Illinois		
The Use of Mobilizations with Movement (MWM) in a Case Series of Patients Diagnosed with Lateral Epicondylitis (LE)	<u>John Bellace PT, CHT</u> Jennifer Dekerlegand MPT	Poster Presentation
<u>Pennsylvania Physical Therapy Association (PPTA) Conference</u> October 24-27, 2013; Seven Springs, Pennsylvania		
Rehabilitation of a Complex Patient with Wallenberg Syndrome	Anne Whiting PT Kjisten Torkelson OTR/L <u>Presenter: Colleen Chancler PT, MHS</u>	Poster Presentation
Outcomes of Patients Receiving Physical Therapy for Temporomandibular Joint Disorders (TMD)	<u>Heather North PT, DPT</u> Diana Hearn PT, DPT, OCS Cheryl Cocca PT, DPT, OCS Tim Bayruns PT, DPT, OCS Jen Dekerlegand MPT	Poster Presentation
Implementation of a Physical Therapy Consult Service for the Emergency Department Observation Unit	<u>Colleen Chancler PT, MHS</u> Esther Bae MPT, DPT Stacey Solomon MPT	Oral Presentation
Physician Referral to Outpatient Physical Therapy for Treatment of Cancer Related Fatigue (CRF)	<u>Jane Oeffner PT, DPT, MBA</u> Andrea Branas MSE, MPT, CLT	Oral Presentation
Acute Care Special Interest Group: "Hospital Acquired Deconditioning: An Evidence Based Review"	<u>Colleen Chancler PT, MHS</u>	Education Session
<u>Pennsylvania Occupational Therapy Association (POTA) Conference</u> November 8-9, 2013; Pittsburgh, Pennsylvania		
Outcomes in Postoperative Patients with Ventricular Assist Devices	<u>Malachy Clancy MOT, OTR/L</u>	Poster Presentation
Rehabilitation of a Complex Patient with Wallenberg Syndrome	<u>Kjisten Torkelson OTR/L</u> Anne Whiting PT	Poster Presentation
Occupational Therapy Groups in the Chronically Critically Ill	<u>Deb Diangelo MS, OTR/L</u>	Poster Presentation
Sleep - The Forgotten ADL	<u>Malachy Clancy MOT, OTR/L</u>	Education Session
Beginning the Journey from Clinic to Academia	<u>Lawrence Stevenson MOT, OTR/L</u>	Education Session

<u>American Speech-Language-Hearing (ASHA) Association Convention</u> November 14-16, 2013; Chicago, Illinois		
The Science & Practice of Big & Loud: An Interdisciplinary Approach to Treating Parkinson's Disease	<u>Heather Cianci PT, MS, GCS</u>	Education Session
<u>Lower Extremity Update 2013</u> November 22-23, 2013; Philadelphia, PA		
Hamstring Injuries: Prevention and Rehabilitation	<u>Marty Kelley, PT, DPT, OCS</u>	Education Session
Practical Applications of Lower Extremity Outcome Measures	<u>Brian Leggin PT, DPT, OCS</u>	Education Session
Current Concepts in the Prevention of ACL Injuries Rehabilitation Following Articular Cartilage Procedures Rehabilitation of Achilles Tendonitis vs. Tendinosis	<u>Brian Eckenrode, PT, DPT, OCS</u>	Education Session
Pathogenesis and Rehabilitation of Ankle Instability	<u>Marisa Pontillo PT, DPT, SCS</u>	Education Session
Anatomy and Biomechanics of the Foot/Ankle Complex	<u>Cheryl Cocca, PT, DPT, OCS</u>	Education Session
Clinical Examination of the Hip and Knee	<u>Molly Dang, PT, DPT, OCS</u> <u>Holly Jo Harvey, PT, DPT</u> <u>Tiffany Prince, PT, DPT, OCS</u>	Workshop
Clinical Examination of the Foot and Ankle	<u>Cheryl Cocca, PT, DPT, OCS</u> <u>Marisa Pontillo, DPT, SC</u>	Workshop
Functional Exercise Progression for Return to Activity	<u>Jeffrey O'Neill, PT, DPT, OCS</u> <u>Allison Greene, DPT</u> <u>Gina Serago, DPT</u>	Workshop
<u>Sports Physical Therapy Section (SPTS) Team Concept Conference</u> December 4-8, 2013; Henderson, Nevada		
Examination and Treatment of Scapular Dysfunction	<u>Marisa Pontillo PT, DPT, SCS</u>	Oral session
Upper Extremity Outcome Instruments	<u>Marisa Pontillo PT, DPT, SCS</u>	Oral session
<u>American Physical Therapy Association's Combined Sections Meeting</u> February 3-6, 2014; Las Vegas, Nevada		
ABC's of Vestibular Rehabilitation	<u>Betsy Grace Georgelos PT, MS, NCS</u>	Pre-Conference Course
From the Playground to the Workplace: Managing Bullying in Healthcare	<u>Jane Oeffner PT, DPT, MBA</u>	Education Session Health Policy and Administration Section

Implementation of a Competency-Based Mentorship Program for Advanced Lymphedema Practice	<u>Joy Cohn, PT, CLT-LANA</u> <u>Rebecca Golden, PT, CLT-LANA</u> <u>Bryan Spinelli, PT, MS, OCS, CLT</u>	Education Session Oncology Section
Shoulder Disorders: ICF-Based Clinical Practice Guidelines	<u>Marty Kelley, PT, DPT, OCS</u> Joseph Godges, PT, DPT, MA, OCS Phillip McClure, PT, PhD, FAPTA Lori Michener, PT, PhD, ATC	Education Session Orthopedics Section
Rehabilitation Considerations for the Female Athlete	<u>Marisa Pontillo, PT, DPT, SCS</u>	Education Session Sports Physical Therapy Section
Reliability of a Newly Developed Physical Assessment for Breast Cancer-Related Lymphedema: LABAT-Lymphedema Assessment of Breast, Arm, and Torso	<u>Bryan Spinelli PT, MS, OCS, CLT</u> Joy Cohn PT, CLT-LANA	Platform Presentation Oncology Section
Reference Values for the Y Balance Test and Single-Leg Hop for Distance in Collegiate Athletes	<u>Marisa Pontillo, PT, DPT, SCS</u>	Platform Presentation Sports Physical Therapy Section
Outcomes of Patients Receiving Physical Therapy for Temporomandibular Joint Disorders	<u>Cheryl Cocca PT, DPT, OCS</u> Diana Hearn PT, DPT, OCS Timothy Bayruns PT, DPT, OCS Heather North PT, DPT Jen Dekerlegand MPT	Poster Presentation Orthopedics Section
PIPSS: A Portable Instrumented Postural Stability System to Assess Dynamic Postural Stability	<u>Betsy Grace Georgelos PT,MS, NCS</u>	Poster Presentation Research Section
A Comparison of the Portable Instrumented Postural Stability System (PIPSS) to the Balance Error Scoring System (BESS)	<u>Betsy Grace Georgelos PT,MS, NCS</u>	Poster Presentation Research Section
A Comparison of Two Taping Techniques (Kinesio and McConnell) and Their Effect on Shoulder Pain in High School Athletes During Functional Activities	<u>Billy Moore PT, DPT</u>	Poster Presentation Sports Physical Therapy Section
Implementation of an Acute Care Physical Therapy Treatment Algorithm in the Management of Scrotal Edema	<u>Bill Pino PT, DPT</u> Joe Adler PT, DPT, CCS Jen Dekerlegand MPT	Poster Presentation Acute Care Section

A Comparison of Range of Motion, Strength, and Function in Patients with Rotator Cuff Tears in a Healthy Population	<u>Brian Leggin PT, DPT, OCS</u>	Poster Presentation Orthopedics Section
Outcome following Non-Operative Management of Rotator Cuff Tears	<u>Brian Leggin PT, DPT, OCS</u>	Platform Presentation Orthopedics Section
Long Term Outcome following Non-Operative Management of Rotator Cuff Tears	<u>Brian Leggin PT, DPT, OCS</u>	Poster Presentation Orthopedics Section
Pennsylvania Physical Therapy Association's Southeast District (SED) Combined Sections Meeting March 22, 2013; Philadelphia, PA		
Temporomandibular Joint Disorder and the Use of Passive Range of Motion Devices and Their Effectiveness in Treating Trismus in the Head and Neck Cancer Population: A Systematic Literature Review	<u>Tim Bayruns, PT, DPT, OCS, CSCS</u>	Poster Presentation
A Novel Approach to Testing Freezing of Gait in Patients with Parkinson's Disease: the Clover Test	<u>Heather Cianci PT, MS, GCS</u> <u>Joellyn Fox PT, DPT</u>	Poster Presentation
Using Timed Tasks to Determine Change after LSVT® Big Treatment in Three Patients with Young Onset Parkinson's Disease	<u>Heather Cianci PT, MS, GCS</u> <u>Joellyn Fox PT, DPT</u>	Poster Presentation
Outcomes of Patients Receiving Physical Therapy for Temporomandibular Joint Disorders	<u>Cheryl Cocca PT, DPT, OCS</u>	Poster Presentation
Is Exclusive Use of the Standardized Position Essential for Accurate and Reliable Goniometric Measurements at the Wrist?	<u>Wendy McCoy PT, CHT</u> Arcadia Students	Poster Presentation
Physician Referral to Outpatient Physical Therapy for Treatment of Cancer Related Fatigue	<u>Jane Oeffner PT, DPT, MBA</u>	Poster Presentation
A Medically Complex Patient After Quadruple Amputation: A Case Study Examining the Provision of Acute Rehabilitation in the Acute Hospital Setting	<u>Jane Oeffner PT, DPT, MBA</u>	Poster Presentation
Evidence Based Rehabilitation of Rotator Cuff Disease: Non-operative and Post-operative Management	<u>Brian Leggin PT, DPT, OCS</u>	Education Session

<u>Philadelphia Hand Rehabilitation Foundation</u> <u>40th Symposium: Surgery and Rehabilitation of the Hand</u> <u>with Emphasis on Tendon and Nerve</u> <u>March 22-24, 2014; Philadelphia, PA</u>		
Scapular Nerve Injuries – Examination and Intervention	<u>Marty Kelley, PT, DPT, OCS</u>	Education Session
Assessment and Management of Rotator Cuff Pathology	<u>Marty Kelley, PT, DPT, OCS</u> <u>Brian Leggin PT, DPT, OCS</u>	Education Session
Clinical Examination of the Shoulder	<u>Marty Kelley, PT, DPT, OCS</u> <u>Brian Leggin PT, DPT, OCS</u>	Education Session
<u>American Occupational Therapy Associations Annual Conference and Expo</u> <u>April 3-6, 2014; Baltimore, Maryland</u>		
Sleep: The Forgotten ADL	<u>Malachy Clancy MOT, OTR/L</u>	Education Session
Acute Care Occupational Therapy Intervention for Patients with Mechanical Circulatory Device Support	<u>Malachy Clancy MOT, OTR/L</u>	Poster Presentation
An Interdisciplinary Oncology Group for Hospitalized Patients	<u>Meredith McElroy MOT, OTR/L</u> <u>Laura Schaffner MS, OTR/L</u>	Poster Presentation
Acute Care Assessment of Cognition in the Oncology Population	<u>Marisa Hart MS, OTR/L</u> <u>Laura Schaffner MS, OTR/L</u>	Poster Presentation
<u>National Association of Long Term Hospitals (NALTH) Annual Meeting</u> <u>May 1-2, 2014; Washington, DC</u>		
Nasendoscopy for Swallowing and Airway Management in the Long Term Acute Care Hospital (LTACH) Setting	<u>Randy Dubin MA,CCC-SLP</u> Michael Grippi, MD	Poster Presentation
<u>Mediware Rehabilitation Annual Conference</u> <u>June 9-12, 2014; Scottsdale, Arizona</u>		
Custom Medilinks Outcome Report to Improve Efficiency and Accuracy of Clinical Outcome Measure Reporting	<u>Chris Kauffman MSPT</u>	Oral Presentation
MediLinks-Epic interface for Charting	<u>Chris Kauffman MSPT</u>	Webinar
<u>Brain Injury Association of Pennsylvania (BIAPA) Conference</u> <u>June 15-17, 2014; Lancaster, PA</u>		
A Case Series Comparing Pusher and Wallenberg Syndrome Outcomes	<u>Carol Wamsley PT, DPT, BS</u>	Poster Presentation

Publications:

Peer Reviewed:

1. Kelley MJ, Shaffer MA, Kuhn JE, Michener LA, Seitz AL, Uhl TL, Godges JJ, McClure P. Response. *J Orthop Sports Phys Ther.* 2013 Dec;43(12):934-6.
2. Kelley MJ, Shaffer MA, Kuhn JE, Michener LA, Seitz AL, Uhl TL, Godges JJ, McClure PW. Shoulder pain and mobility deficits: adhesive capsulitis. *J Orthop Sports Phys Ther.* 2013 May;43(5):A1-31.
3. Severance G, Walsh L. Rehabilitation following bilateral forearm transplantation in the quadrimembral patient: review and recommendations. *Techniques in Hand and Upper Extremity Surgery.* 2013 Dec;17(4):215-20.
4. Pontillo M., Spinelli BA, Sennett BJ. Prediction of In-Season Shoulder Injury from Preseason Testing in Division I Collegiate Football Players. *Sports Health: A Multidisciplinary Approach.* Epub March 7, 2014.
5. Bunting-Perry L, Spindler M, Robinson K, Noorigian J, Cianci H, Duda J. Laser light visual cueing for freezing of gait in Parkinson disease: A pilot study with male participants. *Journal of Rehabilitation Research Development.* 2013. 50(2): 223-30.
6. Heather Cianci, PT, MS, GCS contributed to the publication: van der Marck MA, et al., Consensus-based clinical practice recommendations for the examination and management of falls in patients with Parkinson's disease. *Parkinsonism and Related Disorders.* (2014) April;20(4):360-9.
7. GSPP was acknowledged in the following publication: Chen L, Mao J, Fernandes S, Galantino ML, Wensheng G, LaRiccia P, Teal V, Bowman A, Schumacher R, Farrar J. Integrating Acupuncture with Exercise-Based Physical Therapy for Knee Osteoarthritis: A Randomized Controlled Trial. *Journal of Clinical Rheumatology.* 2013 Sep;19(6):308-16.

Textbooks:

Kelley, MJ, Leggin, BG, Basti, JJ. Shoulder Rehabilitation Chapter found in Textbook of Hand and Upper Extremity Surgery. Weiss, AC, Goldfarb, CA, Hentz, VR, Raven, RB, Slutsky, DJ, and Steinmann, SP (eds). The American Society for Surgery of the Hand, Chicago, IL, 2013.

Pontillo M, Eckenrode BJ. Contributing authors. Meniscal Surgery: Management and Techniques. “Rehabilitation after meniscal repair”. Springer, 2013.

Other Publications:

Chanler C., McDevitt M. Reviewers for the article “Class III Obese Patients: The Effect of Gait and Immobility on Patient Falls” as published in the September 2013 Pennsylvania Patient Safety Advisory.

Pontillo M. Contributing author: The Female Athlete. “Management of Upper Extremity Dysfunction in the Female Athlete”. SPTS Home Study Course: Published 2014.

Fox J. Therapy Tip of the Day: The Importance of Family and Friends. Penn Transmitter Fall 2013.

Awards, Honors and Recognition:

<u>Title of Award</u>	<u>Staff Name</u>	<u>Project Title</u>
Pennsylvania Physical Therapy Association (PPTA) Acute Care SIG Award	Jane Oeffner PT, DPT, MBA	The Pennsylvania Physical Therapy Association Acute Care Special Interest Group's award is provided to a therapist for service, clinical excellence, operational support, teaching and research in the area of Acute Care.
Selected to represent Association of Society of Shoulder & Elbow Therapists (ASSET) on the American Academy of Orthopaedic Surgeons: Appropriate Use Criteria on Optimizing the Management of Full-Thickness Rotator Cuff Tears writing panel	Brian Leggin PT, DPT, OCS	Selected as one of two Physical Therapists representing the Association of Society of Shoulder & Elbow Therapists (ASSET) on the interdisciplinary writing panel for rotator cuff tears. This panel created and published "appropriate use criteria (AUC)" to assist orthopedic surgeons on the operative/non-operative management of patients with rotator cuff tears.
World Parkinson Conference (WPC) special invitation for Poster Tour	Heather Cianci PT, MS, GCS Joellyn Fox PT, DPT	The WPC Program Committee invited selected authors to participate in the organized Posters Tours at the conference. Only 25% of the abstracts submissions were selected for Poster Tours.
Honorable Mention for the National Association of Long Term Hospital's 2014 Goldberg Award	Randy Dubin MA, CCC-SLP	Received an Honorable Mention and qualified for poster display at the 2014 National Association of Long Term Hospital's Conference.
Selected as member of the National Parkinson's Foundation Fall Task Force	Heather Cianci PT, MS, GCS	Co-authored a publication providing consensus-based clinical practice recommendations for the examination and management of falls in Parkinson's Disease.
Selected to co-present the first joint venture webinar organized by the Journal of Orthopedic and Sports Physical Therapy (JOSPT) and the Journal of Bone and Joint Surgery (JBJS)	Marty Kelley, PT, DPT, OCS	Presented a summary of his recent manuscript titled, "Shoulder pain and mobility deficits: adhesive capsulitis" with over 1,900 participants attending the seminar.

Collaborative Projects:

<u>Project Title</u>	<u>Staff Involved</u>	<u>Role in Project</u>
Lung Transplant Body Composition Study	Laura Friedman PT	<ul style="list-style-type: none"> Assisting with data collection
A Randomized Multicenter Trial Comparing Sirolimus plus Prednisone, Sirolimus Extracorporeal Photopheresis plus Prednisone, and Sirolimus/Calcineurin Inhibitor plus Prednisone for the Treatment of Graft-versus-Host Disease	Andrea Branas, MSE, MPT, CLT	<ul style="list-style-type: none"> Assisting the Penn Medicine Bone Marrow Transplant team with data collection
WISER Survivor Study	Bryan Spinelli, PT, MS, OCS, CLT Joy Cohn, PT, CLT-LANA	<ul style="list-style-type: none"> Collaborative project with Katie Schmitz (Principal Investigator), Associate Professor in the Department of Biostatistics and Epidemiology, University of Pennsylvania Bryan Spinelli serving a Co-Investigator on the study
Validity of Clinical Assessments of Resting Scapular Alignment and Scapulothoracic Movement Patterns	Marisa Pontillo PT, DPT, SCS Bryan Spinelli, PT, MS, OCS, CLT	<ul style="list-style-type: none"> Collaborative study with Dr. Dave Ebaugh, Drexel University
The Relationship Between Core Stability and Shoulder Injuries in Athletes	Marisa Pontillo PT, DPT, SCS	<ul style="list-style-type: none"> Collaborative study with Drexel University
The Effect of Breast Cancer Treatment on Shoulder Complex Motion and Coordination	Bryan Spinelli, PT, MS, OCS, CLT	<ul style="list-style-type: none"> Collaborative study with Dr. Dave Ebaugh, Drexel University
The Effect of Positioning on Goniometric Measurements	Wendy McCoy PT, CHT	<ul style="list-style-type: none"> Collaborative study with Arcadia Students
Decision Support Study	Jen Dekerlegand MPT	<ul style="list-style-type: none"> Paid expert assisting Dr. Kathy Bowles from the Penn School of Nursing to review patient cases
Thera-Drive	Carol Wamsley, PT, DPT Aaron Thrush, PT, DPT, MHS	<ul style="list-style-type: none"> Collaborative study with Dr. Michelle Johnson, Associate Professor in the Department of Rehab Medicine at the University of Pennsylvania

Developing Geriatric Resource Nurse-Led Interprofessional Collaborative Practice	Colleen Chancler PT, MHS	<ul style="list-style-type: none"> • Consultant for funded nursing study at the Hospital of the University of Pennsylvania
A Quality Improvement Project Exploring the Use of the Functional Status Score Intensive Care Unit (FSS-ICU) in a Level 1 Trauma ICU	Joe Adler PT, DPT, CCS Jen Dekerlegand MPT	<ul style="list-style-type: none"> • Collaborative study with Arcadia Students
ASPIRE Study	Elsa Amaral, PT Sarah Martyn PT, DPT	<ul style="list-style-type: none"> • Assisting the Hemophilia Team collect functional outcomes data
Systematic Review Spinal Cord Injury	Elena Newland PT, DPT	<ul style="list-style-type: none"> • Collaborative study with Arcadia Students
Functional Outcome Measures for Head and Neck Patients	Meredith Pauly MA, CCC-SLP Tiffany Hogan MA, CCC-SLP	<ul style="list-style-type: none"> • Collaborative study with Dr. Steven Cannady from the Department of Otorhinolaryngology