



New Orleans • February 21–24, 2018

Poster Presentations

(Subject to change. For current programming, refer to <http://www.apta.org/csm/programming/> or the CSM mobile app.)

**An asterisk following a name indicates a “Foundation for Physical Therapy” alumni.*

The 18 sections of APTA have joined together to present posters on various physical therapy topics. Posters may be viewed during Exhibit Hall hours. Authors will be available to discuss their posters from 1:00 pm to 3:00 pm on the following days:

Group 1: Thursday, February 22

Hand Rehabilitation, Home Health, Neurology (Brain Injury, General, Practice Issues, and SCI SIGs), Oncology, Orthopaedics (Foot/Ankle, Hip/Knee, Occupational Health, and Other), Pediatrics, Sports (Knee, Knee-ACL, Running, Sports Residency), Women’s Health

Group 2: Friday, February 23

Cardiovascular/Pulmonary, Clinical Electrophysiology and Wound Management, Geriatrics (Health/Wellness, Mental Health, Osteoporosis), Health Policy and Administration, Neurology (Degenerative Diseases, Vestibular SIGs), Orthopaedics (Imaging, Performing Arts, Poster Award Candidates, Residency Poster Case Reports), Research, Sports (Biomechanics, Case Studies, Foot/Ankle, Shoulder/Elbow, Spine)

Group 3: Saturday, February 24

Acute Care, Aquatics, Education, Federal, Neurology (Balance & Falls, Stroke SIGs), Orthopaedics (Elbow/Wrist/Hand, Pain Management, Shoulder, and Spine SIGs)

Group 1: Thursday, February 22

Hand Rehabilitation

1001 **Physical Therapy Management of a Patient Following Collagenase Injection for Dupuytren’s Contracture**

Boyce D, Cecil MT, Nicoson M
Mary Cecil

1002 Linking Physical Therapy Outcome Measures to the International Classification of Functioning, Disability and Health (ICF) Model in Subjects With Ulnar-Wrist Pain

Abdelmegeed M, Lohman EB, Daher NS, Syed HM
Mohamed Abdelmegeed

1003 Does Range of Motion in the Hand Affect Functional Ability in Persons With Systemic Sclerosis?

Fenter PC, Hayat S, Gilmore T
Paula Fenter

1004 Rehabilitation Following Elbow Lateral Collateral Ligament Repair With a Hamstring Autograft in a Tennis Player

Yen W
Wen-Yau Yen

Home Health

1005 The Impact of Interprofessional Collaboration in the Home Health Care Setting

Mowder-Tinney J, Collesano N, Dewey E, Grant M, Schwartz J, O'Loughlin RE, Chimenti C, Seils M
Chris Chimenti

1006 The Impact of Integrating Knowledge Translation Strategies Into a Continuing Education Course on Outcome Measure Choice in the Home Care Setting

Mowder-Tinney J, Strack D, Terwilliger D, Smith M, Amuso V, Chimenti C
Chris Chimenti

1007 Impact of a Weighted Vest on Gait and Balance in a Patient With Cerebellar Ataxia

Bowman CE, Esposito S, Dieter WB
Colleen Bowman

1008 Does Pre-Assigned Walkway Length Affect Two-Minute Walk Test Scores in Community Dwelling Older Adults?

Dias K, Schulz H, McFadden J, Haring E, Nafar S, Nadler DR

Konrad Dias

1009 Comparing Manual Stretching and Therapeutic Exercises in Post-Operative Treatment of Total Knee Arthroplasties: A Systematic Review

Andella L, Anderson L, Carlson B, Keane T, Morra A, Kunkel A, Marcoux BC

Lauren Andella

1010 The Effect of Auditory Distraction on Self-Reported Pain Threshold Perception

Henderson RJ, Carpenter K, Giurovici M, Heppner Z, Macis TR, Newhouse S, Suing M

Zachary Heppner

1011 The Association of Medications and Falls in the Home Care Setting: A Systematic Review

Collins TL, Wilkie BE, Taylor M

Tracey Collins

1012 Impact of Home Modifications on the Promotion of Aging in Place by Improving Physical Performance in Older Adults: A Systematic Review

Counihan C, Massar A, Mulroy K, Collins TL

Tracey Collins

Neurology: Brain Injury SIG

1013 Progressive Muscle Relaxation, Mindfulness, Meditation, and Mental Practice-Based Interventions for the Treatment of Tremor After Traumatic Brain Injury

Hall AL, Barta K, Sawtelle M

Ashley Hall

1014 Investigating Varied Levels of Visual Attention on Motor Cortex Excitability

Schopke B, Rand E, Ashmun RS, Wagner J, Wolf SL, Borich MR

Bre'anna Schopke

- 1015 Knowledge in Translation: Application of Variable Intensive Stepping Training for a Patient With Chronic Acquired Brain Injury**
Grant-Case CR, Miczak K, Vandaveer B
Carrellyn Grant-Case
- 1016 Concussion Outcomes Throughout the Lifespan: A Systematic Review**
Chamberlain D, Bronder Z, Oakley C, Ross C
Deborah Chamberlain
- 1017 Clinical Correlates of Diffused Traumatic Brain Injury During Functional Recovery**
Gobert D
Denise Gobert
- 1018 Facilitating Walking Recovery With Use of a Wearable Robotic Exoskeleton in an Individual With Traumatic Brian Injury and Ataxia: A Case Study**
Anderl E, Trammell H
Elizabeth Anderl
- 1019 The Impact of Community-Based Rehabilitation Programs on Adults With Traumatic Brain Injury: A Systematic Review**
Kevin G, Nachtman AS, Scully SJ, Taylor M, Schwartz J, Hakim RM
Guenther Kevin
- 1020 Functional Outcome Measure Use in the Examination and Treatment of Patients Following Mild Traumatic Brain Injury (mTBI): A National Survey of Physical Therapy Clinicians**
Scardillo J, Carabrese M, Cillay E, Devlin A, Focht A, Smith Z, Houtan H, Morina A, Rexon J
Janette Scardillo
- 1021 Physiologic Response to Exertion for Asymptomatic Youth 4 to 6 Weeks Post-Concussion**
Hugentobler J, Quatman-Yates C, Nissen KS, Lucas J, Riley MA, Kurowski BG, Lennon A, Gubanich PJ

Jason Hugentobler

- 1022 High-Intensity, Variable Stepping Training Improved Balance in a Person With Chronic Traumatic Brain Injury**
Wojt J, Gwaltney T, Freund J
Jillian Wojt
- 1023 For an Individual With a Concussion, What Impact Does the Timing and Intensity of Activity Have on Recovery From Concussion?**
Gross J, Aikens B, Kregling K, Bryson C
John Gross
- 1024 Rhythmic Auditory Stimulation and Gait Training in Traumatic Brain Injury: A Feasibility Study**
Hays K, Thompson S, Weintraub A, Kowalski RG, Ketchum JM
Kaitlin Hays
- 1025 Physical Therapy Approach to Treatment in Acute Care for Lance-Adams Syndrome**
Kaiser K, Klein D
Kathryn Kaiser
- 1026 Utilizing Intensive Aerobic Training to Improve Command Following in a Person With Altered Level of Consciousness: A Case Study**
Donahue KL, Vandaveer B, Miczak K
Kelly Donahue
- 1027 Power, Gait Speed, and Preparation for High-Level Mobility in Patients With TBI: A Case Study**
McKinney MA, Wingard DP
Margaret McKinney
- 1028 Influence of Patient Cognitive Function on Interrater Reliability of Balance Measurements in Individuals With History of Traumatic Brain Injury**
Lyon MF, Brusola GA, Wingard D
Marissa Lyon

1029 Factors Associated With Rehabilitation Outcomes After Traumatic Brain Injury: Comparing Functional Outcomes Between Traumatic Brain Injury Model Systems Centers Using Hierarchical Linear Modeling

Hofmann MC, Dahdah MN, Pretz C, An V, Barnes S, Bennett MM, Dreer LE, Bergquist T, Shafi S

Melissa Hofmann

1030 Orientation and Mobility Training in an Individual With Acquired Blindness in Setting of TBI With a Left Horizontal Midline Shift

Keenan N

Nicole Keenan

1031 Auditory Reaction Time Using the Psychomotor Vigilance Task in Male High School Athletes

Yates CC, Ferguson S, Kapella K, Lowe L

Shea Ferguson

1032 Use of Visual Feedback During Body Weight-Supported Treadmill Training to Improve Gait and Balance in a Person With an Anoxic Brain Injury: A Case Report

O'Neal S, Hoseini N, Albers A, Khosraviani N

Suzanne O'Neal

1033 Reimagining Rehabilitation: A Case Study for Community-Based Neurorehabilitation

Stevens V, Lindsley B

Vicki Stevens

1034 Action Observation Treatment in the Functional Retraining of an Individual With Cognitive Impairment Following Traumatic Brain Injury: A Case Study

Cron MC, Spigel P, Foster H, Demark L

Maureen Cron

Neurology: General

1035 Early Aggressive Mobilization Following Locked-in Syndrome From Central Pontine Myelinolysis: A Case Study

Cron MC, Spigel P, Foster H

Maureen Cron

- 1036 Diagnostic Differences in Improvement During Inpatient Rehabilitation**
Andrews A, Middleton A
A Williams Andrews
- 1037 Physical Therapy Treatment and Management of a Patient With Hemiballismus in the Outpatient Setting: A Case Report**
Carey AM
Adrianna Carey
- 1038 Temporary Proprioception Interference Via Somatosensory Stimulation: A Protocol for the Upper Limb**
Borstad AL, Bjorklund J, Haag B, Kramer T, Oczak S, Janz Vernoski J
Alexandra Borstad*
- 1039 Reliability and Validity of the Tablet Brief Kinesthesia Test**
Borstad AL, Berg E, Knutson M, Post E, Schmidt N
Alexandra Borstad*
- 1040 Understanding Motor Learning in Individuals With Multiple Sclerosis: Using Real-Life Task Through Virtual Reality**
Al-Sharman A, Khalil H, El-Salem K, Al-Shorafat D, Khazaaleh S, Abu Alfoul L
Alham Al-Sharman
- 1041 Assessing Factors That Influence Patient Education Retention in the Inpatient Setting**
Danto A
Alicia Danto
- 1042 Dystonia Gravidarum Improved After Joint Position Error Training**
Pham T, Elder A, Mayo MC, Wu AD
Alyssa Elder
- 1043 Concurrent Validity of the Virusense® Gait Analysis System for the Quantification of Spatial and Temporal Parameters of Gait**

Strubhar AJ, Tan P, Jarrett L
Andrew Strubhar

1044 Improving Functional Independence Through Task-Specific Training Despite Severe Hypertonicity in a Patient With Neuro-Behçet's: A Case Report

Link A, Perry LA, Foster H, Spigel P
Angela Link

1045 Living With Traumatic Brain Injury in a Rural Setting: Supports and Barriers Across the Continuum of Care

Harrison AL, Hunter EG, Bordy P, Thomas HL, Stokes E, Kitzman P
Anne Harrison

1046 Evaluating the Effects of Transcutaneous Spinal Cord Stimulation on Motor-Evoked Potentials and Posterior Root Muscle Reflexes

Raymond J, Daniel S, Fayer E, Farrell BJ
Jacob Raymond

1047 Body Weight-Supported Treadmill Training (BWSTT) and High-Intensity Interval Training (HIIT) Effects on Gait Performance in Chronic Cerebrovascular Accident

Millspaugh Storms B, Coovert D, Abshire DM, Shaffer J, Vogel JW
Brittney Millspaugh Storms

1048 Carry-Over Effects of Vibrotactile Feedback on Long-Term Balance Training in People With Peripheral Neuropathy: A Case Series

Klatt B, Bao T, Carender WJ, Kinnaird C, Sienko KH, Whitney SL
Brooke Klatt

1049 A Comparison of Gait Dynamics When Using an Ankle-Foot Orthosis Versus No Ankle-Foot Orthosis in People With Hemiplegia Secondary to Stroke

Beckman B, Hollman JH
Bryce Beckman

- 1050 The Effect of Transcranial Direct Current Stimulation on Ankle Torque Production When Delivered With Two Different Electrode Montages**
Perkins K, Blancett D, Graham T, Young R, Lairamore C
Chad Lairamore
- 1051 Compliance With Ankle-Foot Orthoses in the Neurologic Population**
Kelly C, Brown RM, Sells P
Christina Kelly
- 1052 A Case Study: Physical Therapy Interventions for an Atypical Guillain-Barré Syndrome Recovery Pattern**
Sinay D
Daniella Sinay
- 1053 “OPTIMAL” Practice Conditions Enhance the Benefits of Increasing Error Opportunities on Retention of a Stepping Sequence Task**
Levac D, Driscoll K, Galvez JR, Mercado K, O’Neil L
Danielle Levac
- 1054 The Effects of Heat and Cold Immersion on Performance Measures During the Wingate Anaerobic Test**
Bidwell CA, Hoover DL, Knott SK, Parks SE, Revlett CA, Webb DT, Norris E, Arnett S, Judge LW
Donald Hoover
- 1055 Cognitive Assessment in Older Adults With Diabetes Mellitus: A Retrospective Analysis**
Silveira Beck EA, Waitman LR, Santos MJ
Eber Silveira Beck
- 1056 Relationships Among Patient-Reported and Performance-Based Outcome Measures After Stroke**
Schultz E, Lewthwaite R, Chanthaphun S, Winstein CJ
Emily Schultz
- 1057 Effect of Rowing Induced Fatigue on King-Devick and Postural Sway: Preliminary Data**

Boggs E, Stanley A, Willson OR, Andrews R, Harper B, Aron A
Erica Boggs

1058 The Extent of the Relationship Between Sleep Disturbances and Walking Ability in People With Multiple Sclerosis

Al-Sharman A, Khalil H, El-Salem K, Al-Shorafat D, Dawes H, Esser P
Hanan Khalil

1059 Neuroplasticity-Based Intervention Results in Reduction of Falls in a Patient With Camptocormia and Parkinson's Disease

Rodne H, Seiler B, Simonson B, Madsen J, Voorhees SF
Hannah Rodne

1060 Clinician Perspectives on the Use and Utility of Electromyography Recordings for People With Neurologic Conditions

Feldner HA, Howell D, Li J, Kelly VE, Westcott-McCoy S, Steele KM
Heather Feldner

1061 Improved Posttest Scores in Neurologic Content Areas Following an NCS Online Review Course

Stephenson JB, Tucker J, Parker ME, Trojanowski SM, Dennis AN, Beato MC
Jeannie Stephenson

1062 GNE Myopathy: Recognizing Key Features to Optimize Physical Therapy Treatment in a Rare Myopathy

De Simone JM, Fischer S
Jenna De Simone

1063 Benefits of Tango, Boxing, and LSVT Big Interventions for Parkinson's Disease

Millspaugh Storms B, Coover D, Underwood D, Markham J
Brittney Millspaugh-Storms

1064 Relationship of Upper Extremity Range of Motion With Daily Activities and Clinical Measures in Persons With Multiple Sclerosis

Ruiz J, Olson KM, Karpuk J, Triche E, Hawks H, Lo AC
Joan Karpuk

- 1065 Examination of the Relationship of the Timed Up and Go Test to Functional Home and Community Tasks**
Ruiz J, Olson KM, Wargo S, Hawks H, Triche E, Lo AC
Sara Wargo
- 1066 The Impact of a Student-Assisted Workout Program (SAWP) Amongst College Students With Physical and Intellectual Disabilities: A Case Series**
Tucker J, Pabian P, Stocker C, Diana R, Gandola R
Jennifer Tucker
- 1067 The Effects of Transcranial Direct Current Stimulation on Cortical Excitability and Motor Behaviors of the Lower Extremity: A Systematic Review**
Floyd JT, Sydney B, Light BN, Price C, Lairamore C
John Floyd
- 1068 Intensive Robotic-Assisted Therapy Over 2 Consecutive “Robocamps” Is Associated With Walking Benefits for an Adolescent With Right Cerebral Hemispherectomy: A Case Report**
Kasayama JY, Kiseljak-Dusenbury S, Lewthwaite R, Shaw S
Julie Kasayama
- 1069 Effect of Brief Intensive Robotics-Assisted Therapy on Improved Walking Endurance Many Years After Cerebral Hemispherectomy**
Kasayama JY, Blydt-Hansen E, Lewthwaite R, Shaw S
Julie Kasayama
- 1070 A Model for Active Dissemination and Implementation of Clinical Practice Guidelines Published by Academies and Sections of the APTA**
Tilson JK, MacDowell S, Crowner BE, Dannenbaum E, D’Silva LJ, Farrell L, Roth HR, Skop K
Julie Tilson
- 1071 Burst Mode Alternating Electrical Current in the Management of Parsonage-Turner Syndrome: A Case Report**
Haven KE, Lomaglio M

Kimberly Haven

- 1073 Pre-season Subjective Reports, History of Concussion, and King-Devick Test as Injury Risk Factors**
Harper B, Aron A, Atyam A, Favale L, Kopso A, Leake B
Loren Favale
- 1074 Feasibility and Preliminary Outcomes of a Standardized Exercise Program in Adults With Down Syndrome: A Pilot Study**
Flores M, Barta K, Ardolino E, Ferreira G, Sneary M
Megan Flores
- 1075 Physical Therapy Treatment for a Patient With Myasthenia Gravis in the Acute Care Setting: A Case Report**
Self MR, Stockert BW, McKeough M
Megan Self
- 1076 Utilization of Community Resources to Achieve Physical Therapy Goals in an Individual With Vision Loss**
Zeleny M
Michelle Zeleny
- 1077 The Effect of a Divided Attention Task on Gait Velocity in High School Male Athletes**
Lowe L, Crowder M, Watson T, Yates CC
Morgan Crowder
- 1078 Aerobic Capacity and Body Composition in Spinal Muscular Atrophy: A Case Control Study**
Lea M, Emily SL, Andrew SP, Rao AK, De Vivo DC, Garber CE, Montes J
Morgan Lea
- 1079 Dual Task Interference in Upper Extremity Function in Healthy Older Adults: A Current Review of Literature**
Fenlin Antioquia NM
Nikia Fenlin Antioquia

- 1080** **Perceived Health and Healthcare Needs for People With Neurological Conditions and Caregivers Transitioning Back to Rural Communities**
Kitzman P, Hunter B
Patrick Kitman
- 1081** **Using Data From the Activity Measure for Post-Acute Care (AM-PAC) Versus the Morse Fall Scale (MFS) to Predict Patients at Risk for Falls**
Carson R, D'ausilio J, Lynch N, Henderson J
Randy Carson
- 1082** **Less Talk, More Motion: Partnering to Provide Physical Activity to Individuals With Neurologic Disability and Their Caregivers**
Handlery R, Handlery K, Culbertson R, Rivers C, Zaring L, Nester SH, Fritz SL
Reed Handlery
- 1083** **"Y" Balance Test Using a Force Plate in High School Athletes**
Lowe L, Baker J, Codemo S, Kordsmeier J, Garrison K
Sam Codemo
- 1084** **Standardizing Stroke Outcome Measures Across the Continuum of Care: Does a Knowledge Translation Process Work?**
Lawrence SD
Suzanne Lawrence
- 1085** **The Use of an Online Learning Management System and Supporting Technologies to Serve as Preparation for the Neurologic Clinical Specialist Examination**
Trojanowski S, Beato MC, Dennis AN, Williamson A, Stephenson JB, Riley NA
Suzanne Trojanowski
- 1086** **Therapeutic Management of a Patient With Multiple Sclerosis and a Functional Movement Disorder**
Schwartz V, Eikenberry M
Victoria Schwartz
- 1087** **Neural Control Mechanisms Differ Between Bimanual Common Versus Dual-Goal Tasks**

Liao W, Whittall J, Barton JE, McCombe Waller S
Wan-Wen Liao

1088 Efficacy of Cryotherapy on Spasticity in People With Neurological Disorders: A Systematic Review

Kennebeck W, Gaston K, Tran Y, Zarich H, Xia R
Whitney Kennebeck

1089 The Effect of Isolated Attention Training on Motor Performance

Bensinger-Brody Y, Garcia RK, Gottlieb B, Green C, Itzkowitz J, Schindler S, Wolf E
Yocheved Bensinger-Brody

Neurology: Practice Issues

1090 Being Part of the Community: Perceptions of Public Transit by People With Disabilities

Drews J, Fons L, Scharf E, Thompson K, Weber B, Zalewski K
Kathryn Zalewski

Neurology: SCI SIG

1091 Daily Acute Intermittent Hypoxia Enhances Self-Selected Walking Speed in Persons With Chronic Incomplete Spinal Cord Injury

Nogi AL, Peters DM, Thibaudier Y, Trumbower RD
Allison Nogi

1092 Modified Shoewear With Ankle and Foot Orthotics in Persons With Chronic Spinal Cord Injury

Sweet K, Dennis AN
Ashley Dennis

1093 Oxygen Uptake and Muscle Activation While Walking in an Exoskeleton With Variable Assistance in Individuals With Incomplete Spinal Cord Injury

Domingo A, Baxter CG, Ball S, Kennard L, Pham B, Rosario SJ, Sanscartier CT, Kressler J
Carla Baxter

- 1094** **Developing an App to Evaluate Upper Extremity Muscle Activation Patterns Following Spinal Cord Injury**
Beckham D, Gustavson GR, Lewis E, Sinha Ray S, McKay WB, Farrell BJ
Domonique Beckham
- 1095** **So Many “Toys,” So Little Time: How Do You Choose?**
O’Donnell E, Watson EC
Erin O’Donnell
- 1096** **Margin of Stability and the Functional Gait Assessment in Spinal Cord Injury**
Kahn JH, Anderson J, Lorandos SJ, Schember C, Sidor K, Unsworth DA, Gordon KE
Jennifer Kahn
- 1097** **Clinimetric Properties of Wheelchair Propulsion Test Among High Functioning Wheelchair Users**
Francis J, Sullivan C, Vallabhajosula S, Andrews A
Jhonelle Francis
- 1099** **Evaluation and Treatment of a Patient With Bilateral Upper Extremity Paresis and Visual Deficits: A Case Report on a Rare Clinical Presentation**
Dewar K, Pacho LM
Katie Dewar
- 1100** **Impact of a 12-Week Wellness Program on Subjects With Chronic Incomplete Spinal Cord Injury**
Rodriguez K, Wellons RD
Kelly Rodriguez
- 1101** **Backwards Walking as an Intervention for an Individual With an Incomplete Spinal Cord Injury and Cancer**
Lauer KR, Anthony J, Landis L, Tomaszewski S
Kira Lauer
- 1102** **The Development of a Novel Harnessing System to Assist an Adolescent With Complete Paraplegia to Dance With Her Date at Prom**

Radfar KM, Devocht-Patel a

Kristi Radfar

1103 Systematic Progressions of Interventions Encouraging a Return to Functional Ambulation Post Spinal Cord Injury: A Case Report

Morrison KM, Carter R, Theiss RD, O'Shea R

Kristin Morrison

1105 Serratus Anterior Muscle Activity During Exercises for Individuals With Paraplegia

Riek L, Huson MP, Bednarczyk K, Runyon H, White MK, Gardner S, Rutherford S, Dana A

Linda Riek

1106 Do Nerve Transfers Improve Function in Patients With Spinal Cord Injury? A Systematic Review of the Literature

Freedman JB, Igbokwe J, Lin S, Ndaye L, Shaddock K, Krisa L

Ludovic Ndaye

1107 Improved Trunk Control After Robotic Exoskeleton Training in a Patient With Spinal Cord Injury: A Case Report

Poirier M

Megan Poirier

1108 Return to Run: A Six-Week Program for an Individual Post Traumatic Spinal Cord Injury: A Case Study

DeGeorge N, Kelly J

Nicole DeGeorge

1110 Respiratory Criteria to Determine Readiness to Wean From Diaphragm Pacing in Patients With Cervical Spinal Cord Injuries

Freeborn PA, Doughty K, D'Alessandro A, Jacobs G, Millron KG, David F, Fox EJ

Paul Freeborn

- 1111 Proficient Exoskeleton Use With Significant Musculoskeletal Limitations: What Are the Recurring Themes of Successful Individuals?**
Kallins M, Scott WH, Geigle PR
Paula Geigle
- 1112 Operant Conditioning of the Tibialis Anterior Motor-Evoked Potential to Transcranial Magnetic Stimulation in People With and Without Incomplete Spinal Cord Injury**
Cote R, Thompson AK
Rachel Cote
- 1113 Efficacy of Virtual Reality and Visual Illusion on Neuropathic Pain in Spinal Cord Injury: A Systematic Review**
Nielsen RA, Barnes LJ, Curbow Wilcox KJ
Rachel Nielsen
- 1114 Effects of Ekso Training on Walking Function and Health in People With Incomplete Spinal Cord Injury: A Case Series**
Domingo A, Tam R, Willcocks S, Goff M, Colwell S, Kressler J
Rowena Tam
- 1115 Integration of Neuropsychology With Physical Therapy for a Patient With Acute Spinal Cord Injury: A Case Report**
Cahill RK, Rankin EJ, Spigel P, Foster H, Perry LA
Ryann Cahill
- 1116 Using the CanPain SCI Clinical Practice Guidelines to Address Neuropathic Pain After Spinal Cord Infarct to Dramatically Improve Mobility**
Kleinsteins S, Cheng T
Sarah Kleinsteins
- 1117 Central Nervous System Connectivity in a Man With Motor Incomplete Tetraplegia**
Johnston TE, Krisa L, Saksema S, Conklin CJ, Alizadeh M, Fisher J, Mohamed F
Therese Johnston

Oncology

- 1118 Utilizing Quantitative and Systematic Strategies to Improve Patient Outcome in the Orthopedic Oncology Population**
Compston A
Amy Compston
- 1119 Effects of Endurance Training in a Patient With Primary Lymphedema Following a Rebounder Exercise Protocol: A Case Report**
Lelis A, Bolanos J, Wong M
Annemay Lelis
- 1120 Cancer Rehabilitation in an Outpatient Physical Therapy Setting: Establishing a Clinical Pathway and Measuring Fatigue, Pain, Distress, and Functional Mobility Outcomes**
Kerkman AC, Christensen DL
Anya Kerkman
- 1121 Functional Outcomes for Children, Adolescents, and Young Adults With Osteonecrosis Following Hip Core Decompression**
DeFeo BM, Neel M, Kaste SC, Pui C, Jeha S, Hankins J, Srivastava D, Ness KK
Brian DeFeo
- 1122 Improving Student Physical Therapists' Confidence in Leading a Community Exercise Class for Cancer Survivors**
Yim CW, Yamada KA
Christine Yim
- 1123 Physical Therapist Integration in an Outpatient Bone Marrow Transplant Clinic: A Quality Improvement Project**
Barnes C, Rushton RJ, Noren CS, Lee CJ, Couriel DR, Lastayo PC
Christopher Barnes
- 1124 Physical Therapy–Based Interventions Improve Balance, Function, Symptoms, and Quality of Life in Patients With Chemotherapy-Induced Peripheral Neuropathy: A Systematic Review**
Doyle L, Brayall P, Donlon E, Leiby R, Simoneau K

Erin Donlon

1125 Relationship of Breast Cancer Survivors' Perception of Cognition, Fatigue and Functional Activities in Rural Pennsylvania: A Pilot Study

Mulligan I, Baker SH, Lorusso S

Ivan Mulligan

1126 The Use of Telehealth Interventions to Improve Physical Activity in Adult Cancer Survivors: A Systematic Review

Blackwood J, Huang M

Jennifer Blackwood

1127 The Effect of Physical Activity on Pain, Quality of Life, and Self-Reported Physical Function in Women With Aromatase Inhibitor-Related Arthralgia: An Evidence-Based Review and Meta-Analysis

Field J, Berdoulay CS, Lee J

Jennifer Field

1128 Management of a Patient With Lipedema Post Water Jet-Assisted Liposuction

Janota J, Ryan K, Lampe K

Jessica Janota

1129 The Effects of an 8-Week Interdisciplinary Exercise Program on Cancer Survivors: A Case Series

Mayer JE, Brown S, Danko J, Sorrentino N, Barnes Hulbert C, Koval M, Gray R, Di Francesco A, Todd V, Micale F

Jill Mayer

1130 Improving Outcomes of a Patient With Brain Tumor Through Implementation of Oncology Grand Rounds at an Acute Rehabilitation Hospital

Favara KN, Motisi S

Kimberly Favara

1131 Reliability of Localized Edema Measurement Following Breast Cancer Surgery

Bicking L, Bodziak B, Cichos S, Brutger R, Koehler L
Leah Bicking

1132 Impact of Physical Therapy Treatment on Improving Function and Quality of Life in a Patient With an Anaplastic Astrocytoma: A Case Study

Knopf L, Kedzierska I
Lindsey Knopf

1133 Overcoming Psychosocial Obstacles Related to Selective Mutism in the Treatment of a Pediatric Patient With Acute Lymphoblastic Leukemia (ALL): Case Report

Knopf L, Khalil NS
Lindsey Knopf

1134 Changes in Pain and Distress During Pivotal Cancer Care Time Points

Lester A, Clark D, Higginbotham S, Merritt P, VanHoose LD
Lisa VanHoose*

1135 Early Mobilization in a Patient With Malignant Spinal Cord Compression

Quintans M
Melanie Quintans

1136 Feasibility of Circuit Training During Hematopoietic Stem Cell Transplantation: A Case Series

Keppel ME, Smith BK
Morgan Keppel

1137 Cancer Survivors Present With Diverse Physical Impairments: Description and Implications for Oncology Rehabilitation

Marker R, Jankowski C, Peters JC, Purcell WT
Ryan Marker*

1138 The Acute Care Rehabilitation of a Client With Myositis After Allogeneic Stem Cell Transplant

Dennis AN, Gaines MP, Collins S, Ryan-Winhoff M
Shannon Collins

1139 Improving the Efficiency and Effectiveness of Physical Therapy Care for Patients Actively Undergoing Treatment for Pediatric Cancers

Ryninger M, Caviston SD, Devirgilio K, Branias AR, Eilbacher J
Stacey Caviston

1140 Mechanical Suppression of Breast Cancer Cell Invasion and Osteoclastogenesis Requires the LINC Nuclear Complex

Yi X, Wright L, Pagnotti G, Regan JN, Uzer G, Rubin C, Mohammad KS, Guise TA, Thompson WR
William Thompson*

Orthopaedics: Foot/Ankle

1141 Derivation of a Clinical Estimate of Achilles Tendon Load During Running

Geddes A, Willy RW, Willson JD
Andrew Geddes

1142 The Relationship Between Hip Strength, Running Gait Foot Strike Pattern, and Running-Related Injury

DeAmara A, Mynatt K, Lyons M, Rothschild CE, Pabian P
Anthony DeAmara

1143 Early Use of Feedback Cues Improve Gait and Functional Outcomes in a Patient After Double Arthrodesis

Ridenhour B
Bethany Ridenhour

1144 The Reliability of a Novel Heel Rise Test Versus Goniometry to Assess Plantarflexion Range of Motion

Ness BM, Sudhagoni R, Tao H, Zimney K, Full O, Seehafer L, Walder C
Brandon Ness

1145 Effect of Two Types of Tape on Foot Posture and Range of Motion Before and After Exercise in Healthy Individuals

Young CM, Cornwall MW, Raab S, Jain TK
Carson Young

- 1146 Short and Long-Term Outcomes for a Patient With Midsubstance Achilles Tendinosis Managed With Astym and Exercise**
Slaven EJ, Uebelhor CA
Emily Slaven
- 1147 The Effect of Anti-pronation Taping on Gait Characteristics in Healthy Adults: A Pilot Study**
Mount H, LaPorte C, Porter R, Sutton B
Heather Mount
- 1148 Performance of Bilateral and Unilateral Heel Rise Task in People With Diabetes Mellitus and Peripheral Neuropathy**
Jeong H, Mueller MJ, Hastings M
Hyo-Jung Jeong
- 1149 Functional Improvements After Conservative Postoperative Management of a Lisfranc Injury: A Case Report**
Wojt J, McHugh H, Vallabhajosula S
Jillian Wojt
- 1150 Reliability of Measuring Dorsal Arch Height During a Modified Windlass Test**
Henderson JM, Stevens K, Adornetto T, Long C, May O, Medenwaldt R
Joel Henderson
- 1151 The Effect of a Structured Treatment Program Consisting of Manual Therapy, Dry Needling, and Eccentric Exercise to Improve Function and Reduce Pain in Patients With Achilles Tendinopathy: A Case Series**
Swieboda K, Yake DM, Walston ZE
Kevin Swieboda
- 1152 Effects of Gastrocnemius/Soleus Self-Myofascial Release Versus Dynamic Gastrocnemius/Soleus Stretching on Closed Chain Dorsiflexion**
Kruchowsky K, Aune D, Horten A, Kim J, Rogers J
Kimberly Kruchowsky

- 1153 Comparison of Lower Leg Muscle Activity Between Two Balance Devices During Squat and Lunge Exercise**
Bouillon L, Nagel A, Fidell C, Canter H, Hockenberry K
Lucinda Bouillon
- 1154 Combined Exercise and Barefoot Weight-Bearing Program Influences Measures of Foot Function in People With Asymptomatic Flat Feet**
Keefer Hutchison ML, Houck J, Whited T, Howland S, Thompson B, Foster A, Jarbath J, Modafferi A, Brumitt J
Marcey Keefer Hutchison
- 1155 Complex Regional Pain Syndrome: The Application of Graded Motor Imagery and Graded Activity—A Case Report**
Shepherd M, Louw A
Mark Shepherd
- 1156 The Assistance of Mechanical Lumbar Traction in Reducing Persistent Plantar Foot Pain**
Dreger M, Carroll A, Manal TJ
Melissa Dreger
- 1157 Degree of Tendon Structural Change Relates to Symptomatic Recovery in Patients With Achilles Tendinopathy**
Corrigan P, Cortes DH, Silbernagel KG
Patrick Corrigan
- 1158 End-Stage Hallux Rigidus Requiring Cheilectomy in a 24-Year-Old Patient**
Scorza C, Strittmatter A
C Ryan Scorza
- 1159 Proximal Plantar Intrinsic Tendinopathy (PPIT): A New Differential Diagnosis for Plantar Heel Pain**
Christie SA
Sean Christie
- 1160 Relationship Between Static and Dynamic Postural Control in Individuals With and Without Chronic Ankle Instability**

Manning SM, Groulx D, Fadool M, Wikstrom E, Freund J, Vallabhajosula S
Stephanie Manning

1161 Is It Turf Toe or Articular Derangement? A Case Report

O'Dell W

William O'Dell

Orthopaedics: Hip/Knee

1162 Perceived Instability Is Associated With Strength, Not Frontal Knee Laxity in Patients With Advanced Knee Osteoarthritis

Chaudhari AM, Schmitt LC, Freisinger G, Lewis JM, Hutter EE, Pan X, Siston RA

Ajit Chaudhari

1163 Isometric Strength Testing: Reliability and Validity of a Novel Testing Device Compared to a Handheld Dynamometer

Piggott AA, Brindle RA, Goodstadt N, Silfies SP

Akil Piggott

1164 Effectiveness of Movement Retraining in a Service Member With Chronic Knee Pain

Cascone A, Yoder A, Mazzone BN, Farrokhi S

Alex Cascone

1165 Hip Muscle Strength and Tibiofemoral and Patellofemoral Cartilage Damage Worsening in Persons With Knee Osteoarthritis

Chang AH, Chmiel JS, Hayes KW, Guerhazi A, Prasad PV, Almagor O, Moio K, Belisle L, Zhang Y, Sharma L

Alison Chang

1166 Use of Neuromuscular Electrical Stimulation During Physical Therapy Reduces the Incidence of Arthrofibrosis After Total Knee Arthroplasty

Bhave A, McGinn T, Kim D, Gwam C, Mellinger S

Anil Bhave

1167 Poor Movement Strategies Accompany Self-Reported Walking Difficulty in Knee Osteoarthritis

Na A, Gugala Z, Buchanan TS

Annalisa Na

- 1168** **Improvements With Functional Mobility in a Geriatric Patient Who Has Undergone Knee Arthroplasty After Including High-Velocity Exercise in Conjunction With Physical Therapy: A Case Study**
Suarez A, Walston ZE, Yake DM
Anthony Suarez
- 1169** **The Relationship Between Diabetes and Knee Pain Severity, Unilateral or Bilateral Knee Pain: Data From the Osteoarthritis Initiatives**
Alenazi AM, Alshehri M, Hoover JC, Alothman S, Sharma NK, Bindawas SM, Kluding P
Aqeel Alenazi
- 1170** **Single Leg Loading Assessment Tool: Inter and Intra-Rater Reliability Using a Quantitative Measurement Tool to Assess the Qualitative Mechanics of a Triple Hop**
Chen B, Burgess C, Dulay R, Hermosura J, Willis DK, Holness S, Sueki DG, Tonley J
Betty Chen
- 1171** **Building a Better Gluteal Bridge: Electromyographic Analysis of Hip Muscle Activity During Modified Single-Leg Bridges**
Lehecka B, Edwards M, Martin L, Thach K, Haverkamp R, Porter K, Hakansson NA
BJ Lehecka
- 1172** **The Role of Physical Therapy After Femoral Acetabular Impingement Hip Arthroscopy: Does Visit Utilization Affect 1-Year Clinical Outcome Scores?**
Horton B, Miller CJ, West H
Brandy Horton
- 1173** **Immediate Influence of Manual Physical Therapy on Quadriceps Muscle Function**
Pickens B, Allen C, Deyle GD, Lester ME
Bryan Pickens

- 1174 Gait Alterations in Femoroacetabular Impingement Syndrome Differ by Sex**
Lewis C, Khuu A, Loverro KL
Cara L Lewis
- 1175 Step Width Affects Hip Contact Forces During Running**
Campbell C, Willy RW, Willson JD, Meardon SA
Caroline Campbell
- 1176 Differences in Knee Mechanics Between Runners With High and Low Quadriceps Rate of Torque Development**
Beegan C, Garcia C, Omidy F, Kline P, Davis K, Noehren B
Chelsea Beegan
- 1177 Lumbar Thrust Manipulation and Exercise for the Treatment of Patellofemoral Pain: A Case Series**
Rausch C, Walston ZE, Yake DM
Chris Rausch
- 1178 Anthropometric and Movement Pattern Characteristics of Siblings With Anterior Cruciate Ligament Injuries: A Case Series**
Flowers DW, Frilot C, Dunn S, Olmedo M
Daniel Flowers
- 1179 Acute Calcific Tendinitis of the Rectus Femoris Managed With Multimodal Physical Therapy**
Calley DQ
Darren Calley
- 1180 Conservative Management Using Progressive Loading Strategy for a 52-Year-Old Female With a Diagnosis of Degenerative Joint Disease and Gluteal Tendinopathy**
Eldridge DA
David Eldridge
- 1181 Electromyography of the Hip and Thigh Muscles During 2 Variations of the Lunge Exercise**

Krause DA, Fraboni DF, McWilliams TJ, Rebhan RL, Elliott JJ
David Krause

1182 Gait Speed and Timed Up and Go Score Associated With Increased Fall Risks for Total Shoulder Arthroplasty and Rotator Cuff Surgery

Llaneza DA, Thigpen CA, Reuschel B, Shanley E, Kissenberth M, Toan S
David Llaneza

1183 The Long-Term Effects of Eccentric Exercise Versus Extracorporeal Shockwave Therapy in Athletes Aged 18-50 With Patellar Tendinopathy: A Meta-Analysis and Systematic Review

Walker DL, Hickey CJ, Lee S
Deborah Walker

1184 Delayed Infection in a Patient Following Total Hip Arthroplasty

Cwian DC, Bohra M, Peyton C
Deidre Cwian

1185 Functional Versus Standardized: Which Gluteus Medius Strength Test Best Correlates to Risk of Knee Injury in Collegiate Soccer Players?

Jakszta LM, Schneider G, Hughes C, Rich AJ, Parker ME
Gary Schneider

1186 Reduce Variability and Show IMPACT to Stay Viable in Bundled Payments for Joint Replacement

Moore J
Janine Moore

1187 Preoperative Activity Level and Body Mass Index Influences One-Year Disability Scores Following Hip Arthroscopy

Christensen J, Marland J, Miller CJ, Horton B, West H
Jesse Christensen

1188 Muscle Strength in 10 Years After Total Hip Arthroplasty: Comparison With Healthy Individuals Controlled Cross-Sectional Study

Cazarini C, Silva Neto JB, Macena A, Daltro R, Freitas DG, Alves VD
João Silva Neto

- 1189** **2D and 3D Kinematics During Lateral Step-Down Testing in Individuals With Anterior Cruciate Ligament Reconstruction**
Mostaed M, Werner D, Barrios J
Joaquin Barrios*
- 1190** **Lateral Step-Down Movement Quality Correlates With Hip Frontal Plane Mechanics During Drop Vertical Jump Testing in Subjects With History of Anterior Cruciate Ligament Reconstruction**
Werner D, Mostaed M, Barrios J
Joaquin Barrios*
- 1191** **Do Runners Demonstrate Less Risky Hip and Knee Kinematics Than Non-Runners During Drop Vertical Jumps?**
Werner D, Barrios J
Joaquin Barrios*
- 1192** **Effects of Therapeutic Ultrasound on the Stability of Cemented Simulated Implants**
Bonutti PM, Beyers J, Bierman TM, Cremens M, Tipsword N
Justin Beyers
- 1193** **Recovery Following Oxford Partial Knee Replacement: Physical Therapy—Less Is More, Later Is Better!**
Jenkins C, Gamito Silva De Viego N, Jackson W, Bottomley N, Murray D, Price A, Barker K
Karen Barker
- 1194** **The Relationship Between Function, Activity, and Weight Change: An Exploration of the Complexity of Weight Loss and Gain Following Knee Replacement Surgery in Men**
Toye F, Room J, Barker K
Karen Barker
- 1195** **Progressive Rehabilitation After Total Hip Arthroplasty: A Pilot and Feasibility Study**
Madara KC, Marmon AR, Aljehani MS, Zeni J, Rasis LW

Kathleen Madara

- 1196 Reliability of Passive Straight Leg Raise Vs Passive Popliteal Angle**
Bauer LE, Gradoz M, Grindstaff TL, Bagwell JJ
Lauren Bauer
- 1197 Instrument-Assisted Soft Tissue Mobilization and Proprioceptive Neuromuscular Facilitation Techniques Improve Hamstring Flexibility Better Than Static Stretching**
Gunn L, Magnuson J, Iglowski N, Morgan B, Stewart JC, Fritz SL, Arnot C
Leanna Gunn
- 1198 Frontal Plane Muscle Strength and Range of Motion of the Hip and Ankle in Females With Patellofemoral Pain**
Hoglund LT, McGinnis L, Pathak R, Pothen A, Santos F
Lisa Hoglund
- 1199 Can vs. Do: Using Walking Speed and Moderate-to-Vigorous Physical Activity to Predict Incident Low Health-Related Quality of Life and Disability**
Thoma LM, Master H, Christiansen MB, Mathews DR, White D
Louise Thoma
- 1200 Treatment Fidelity Among Treatment Providers in a Multicenter, Randomized Clinical Trial Comparing Two Rehabilitation Strategies for People With Prearthritic Hip Disease**
Harris-Hayes M, Bove AM, Brown K, Burgess MM, King V, Mancino JF, Wortman D, Fitzgerald G
Marcie Harris-Hayes*
- 1201 McMurray's Test and Its Modifications: A Systematic Review**
Gugliotti M, Storic L, Mathew CG, Bershad D, Arantes J, Kunkle K, Renner NM, Philip R
Mark Gugliotti
- 1202 Quadriceps Muscle Quickness Relates to Function in People With Knee Osteoarthritis**

Rudolph KS, Devine M, Donovitch MJ
Matthew Devine

1204 Is a Growing Waistline Over 8 Years Associated With Incident Functional Limitation and Low Health-Related Quality of Life in Knee Osteoarthritis?

Christiansen MB, Thoma LM, Master H, Mathews DR, White D
Meredith Christiansen

1205 Effects of Real-Time Biofeedback Using Instrumented Insoles on Recovery After Total Knee Arthroplasty: A Pilot Study

Bade M, Cheuy V, Loyd B, Jaeckel M, Zeni J, Christiansen CL, Stevens-Lapsley JE
Michael Bade*

1206 Clinical Decision Making in the Evaluation and Management of an Elite Female Gymnast With a Hamstring Strain and Underlying Adverse Neural Tension

Giardina M
Michael Giardina

1207 Quantifying Frontal Plane Knee Kinematics in Subjects With Anterior Knee Pain: the Reliability and Concurrent Validity of 2D Motion Analysis

Ramirez MM, Negrete R, Hanney WJ, Kolber MJ
Michelle Ramirez

1208 Benefits of Prehabilitation on Functional Outcomes in Total Knee Arthroplasty Patients: A Systematic Review

Shotts R, Lancaster C, Dew M, Phillips J, Randle D, Huang M
Min Huang

1209 Comparison of the Reliability of the Vertical Ground Reaction Forces During the Single-Leg Hop Test for Distance and the Alternating Limb Crossover Hop Test for Distance in Normal Subjects

Van Dyke N, McLean J, Ash J, Gay DA, Riemann BL, Karnes J, Glenn FA, Davies GJ
Nathaniel Van Dyke

1210 Efficacy of a Computerized Knee Simulation Model on Developing Manual Therapy Skills in Physical Therapy Students

Buchanan A, Cail N, Crum B, Ellington T, Bringman D, Glenn FA, Karnes J, Worst HS, Davies GJ

Niki Cail

1211 The Reliability and Concurrent Validity of the Ober Test: Effect of a Stabilization Belt

Olivencia O, Gormely T, Russ BS, Kolber MJ

Ovidio Olivencia

1212 Quadriceps Rate of Torque Development Predicts Knee Flexion Mechanics During Walking After Total Knee Arthroplasty

Kline P, Jacobs CA, Duncan S, Noehren B

Paul Kline

1213 Hip Rotation Range of Motion in National Basketball Association Players: Establishing a Normative Data Base

Anloague P, Strack D, Eaton C, Short S, Forsythe JD, Barga K, Brewster D

Philip Anloague

1214 A Mechanism for Ligamentum Teres Injuries in Femoroacetabular Impingement: An Anatomical Study

Martin RL, McGovern RP, Kivlan BR

Robroy Martin

1215 Evidence-Based Procedures for Performing the Single-Leg Squat Test and Step-Down Test: A Systematic Review

McGovern RP, Martin RL, Christoforetti J, Kivlan BR

Robroy Martin

1216 Hip Adductors Are Bilaterally Stronger in Females With Bilateral Patellofemoral Pain Compared to Unilateral Patellofemoral Pain

Voorhees SF, Heyne-Lindholm P

Sara Voorhees

- 1217** **Dynamic Function in the Symptomatic Hip With Femoral Acetabular Impingement Compared to Radiographically Documented Healthy Control Group During Stair Ascent and Descent**
Backus SI, Kraszewski AP, Maak TG, Hillstrom H, Kelly BT, Ranawat AS
Sherry Backus
- 1218** **Ankle Dorsiflexion and 2D Hip, Pelvic, and Trunk Kinematics in Patients With Chronic Hip Joint Pain During Forward Step-Down**
Foster SN, Harris MD, Hastings MK, Mueller MJ, Wiseman T, Huber N, Harris-Hayes M
Stefanie Foster
- 1219** **Physical Therapists' Attitudes Towards Rehabilitation Following Anterior Cruciate Ligament Injury**
Gering C, Miller J, Jain TK
Tarang Jain
- 1220** **Biomechanical Factors Related to Knee Pain in Cyclists: A Systematic Review of the Literature**
Johnston TE, Baskins TL, Koppel RV, Oliver SA, Stieber DJ, Hoglund LT
Therese Johnston
- 1221** **Blood Flow Restriction Training for Chronic Quadriceps Weakness and Atrophy: A Case Report**
Baldwin T, Baldwin F
Tobi Baldwin
- 1222** **Quantifying Ground Reaction Forces of Double- and Single-Leg Plyometric Exercises in a Horizontal, Gravity-Minimized Position**
Broering TJ, Fair R, Johnson D, Lamb NR, Riemann BL, Davies GJ, Karnes JL
Andrew Johnson
- 1223** **Influence of Diabetes on the Recovery Trajectories of Patients' Physical Function Deficits After Total Knee Arthroplasty**
Cheuy V, Loyd B, Hafner W, Iannitto J, Kittelson A, Waugh D, Stevens-Lapsley JE
Victor Cheuy

1224 Recommended Treatment Interventions After Manipulation Under Anesthesia: A Case Study of a Recreational Rower After Total Knee Arthroplasty

Behrns WA, Mizuta J, Fritz E

William Behrns

1225 The Impact of Rehabilitation to Improve Knee Range of Motion on Relieving Symptoms From Knee Osteoarthritis

Claussen W, Bauman S

William Claussen

1226 The Addition of Body Weight–Supported Treadmill Training to Manual Therapy and Exercise in the Management of Hip OA: A Case Series

Garcia WJ, Garnatz R, Lam-Tran DP, Milton A, Sorensen M, Whitman JM

William Garcia

Orthopaedics: Occupational Health

1227 Work Performance and Residuum Anthropometrics in Healthy Men With Transtibial Limb Loss: 12-Month Follow-Up

Dionne C, Crawford DA, Day J, Ertl WJ

Carol Dionne*

1228 Interrater Reliability of Physical Therapy Students Using the Functional Movement Screen

Manton C, Griffin L, Roof K, Santiago C, Toprani B

Lauren Griffin

1229 Work-Related Musculoskeletal Injuries in Physical Therapy Students: A Pilot Study

Orchard M, Jain TK

Matthew Orchard

Orthopaedics: Other

1230 Cost-Effectiveness of Physical Therapist Services for Low Back Pain

Kareha S, Migliore S, Elnaggar S, Pasquino AV, Sitaras N, Sorensen K

Stephen Kareha

- 1231 A Deeper Understanding: Choosing an Exercise Self-Efficacy Scale for College-Aged Wellness Clients**
Kays A, Sebelski CA
Adam Kays
- 1232 Recognition and Treatment of Yellow Flags Improves Outcomes in a Patient With Chronic Low Back Pain: A Therapeutic Neuroscience Education Approach**
Russomano Nelson A
Alexandra Russomano Nelson
- 1233 A Comparison of the Kinetics and Kinematics of Conventional and Powered (Microprocessor) Ankle-Foot Prostheses During Level Ground, Stair and Ramp Ambulation: A Systematic Review**
Fleer A, Gibson M, Stephens K, Surber S
Amber Fleer
- 1234 Validity and Reliability of the Angles Video Goniometer App for the Assessment of Joint Angles in Children and Adults**
Baraldi Cunha A, Babik I, Harbourne RT, Chang H, Stankus J, Lobo MA
Andrea Baraldi Cunha
- 1235 Case Study Report: Physical Therapy Treatment of a Chronic Deep Digital Flexor Tendon Injury in an Eight-Year-Old Thoroughbred Mare**
Tuzson A
Ann Tuzson
- 1236 Assessing Meaningful Change in the PROMIS® Physical Function Within an Outpatient Orthopaedic Physical Therapy Setting**
Thackeray A, Magel JS, Fritz J, Hess R, Brodke DS
Anne Thackeray
- 1237 Post-Concussion Syndrome in an Outpatient Orthopedic Clinic: A Case Report on Interventions for a Patient With Lingering Concussion Symptoms**

Adams BJ, Horn LB

Benjamin Adams

1238 An Ongoing Patient Dialogue of Blood Pressure Education in Orthopedic Physical Therapy: A Case Report

Swanson B, Franck CC

Braden Swanson

1239 Cervical Spine Thrust Joint Manipulation, Education, and a Home Exercise Program for the Management of Individuals With Temporomandibular Disorder: A Prospective Case Series

Reynolds B, Brown J

Breanna Reynolds

1240 Identification of a Lipoma in a Patient With Shoulder Pain After a Motor Vehicle Accident: A Case Report

Wike BL, Riley PL, Fisher S, Coronado RA

Brian Wike

1241 The Impact of Body Weight, Age, Tobacco and Alcohol Use on Presence of Secondary Musculoskeletal Conditions in Service Members With Unilateral Amputations

Mazzone BN, Yoder A, Eskridge SL, Shannon K, Weedman C, Farrokhi S

Brittney Mazzone

1242 The Validity and Reliability of a Smartphone Application for Measuring Range of Motion in All Planes

Smith BA, Hunt S, Roach K, Grattan P, Cromartie MA, Ferencak JJ, Husar C, Peele G, Kelly N, Smith R

Bryon Smith

1243 The Use of Animal-Assisted Therapy to Improve Level of Activity and Functional Outcomes in an Inpatient Rehabilitation Facility: A Case Report

Denzer-Weiler C

Caitlin Denzer-Weiler

- 1244** **Appropriate Management of a Patient With Undiagnosed Multiple Sclerosis Presenting With Knee Pain**
Ashmore CR
Caleb Ashmore
- 1245** **Differential Diagnosis and Medical Screening of a Young Male With Idiopathic Foot Drop**
Bolton C, Hartstein A
Cameron Bolton
- 1246** **The Experiences of Adult-Oriented Physical Therapists Providing Services for Individuals With Lifelong Disabilities**
Gohrband CL, Howell DM, Harrison A
Catherine Gohrband
- 1247** **Case Report: Implementation of Collaborative PT/MD Primary Care Service**
Kang D, Cuddeford TJ, Rahkola S, Houck J
Dan Kang
- 1248** **No Difference Was Found Between Group or Individual Physical Therapy Intervention as Evidenced by Pain and Functional Outcomes After Hip or Knee Joint Replacement: A Systematic Literature Review**
Dwyer K, Boulanger K, Bekaert J, Pollutro K, Blake M, Bianchi NA, Sargent E, Orest MR, Escorpizo RS
Joseph Bekaert
- 1249** **Effectiveness in Assessing Lower Extremity Functional Balance in Individuals With Lower Extremity Dysfunction Using the Star Excursion Balance Test Vs Y Balance Test: A Systematic Review**
Klein AB, Bonilla J, Barrero E, Lindsey S, Shi A, Sobucki E
Erin Barrero
- 1250** **Physiotherapy in Emergency Departments for Patients With Musculoskeletal Disorders: A Systematic Review of the Literature**
Matifat E, Mequignon M, Blake C, Cunningham CG, Desmeules F
Eveline Matifat

1251 Preliminary Results of an Advanced Practice Physiotherapy Model of Care for Patients With Musculoskeletal Disorders Presenting to an Emergency Department

Matifat E, Mequignon M, Perreault K, Roy J, Aiken A, Gagnon É, Carlesso L, Lowry V, Décary S, Hamelin B, Farley N, Pelletier D, Desmeules F

Eveline Matifat

1252 Effects of a Metronome on Gait Symmetry for Individuals With Lower Limb Loss

Corio F, Troiano R, Binckes K, Prisco A, Schobben S, Sullivan S, Torrescano V

Frances Corio

1253 Examination and Interventions for the Hips in the Management of Low Back Pain: A Survey of Physical Therapists

Burns SA, Cleland J, Rivett D, Snodgrass SJ

Scott Burns

1254 A Review of Pitching Kinematics at the Moment of Foot Contact in Youth Baseball: 2007–2017

Judice GC, Sebeliski CA

Gregory Judice

1255 Correlation Between the Spirit Bike Maximal Power Output and Other Lower Extremity Power Output Tests

Adams J, Brown J, Mendiola GW, Sullivan R, Williams C, Glenn FA, Davies GJ

Gunnar Mendiola

1256 The Impact of Using a Unilateral Microprocessor Prosthetic Knee for Individuals With Transfemoral Amputation on Functional Mobility: A Systematic Review

Derenick H, Falvo C, Savakinas TJ, Wilkie B, Leininger PM, Hakim RM, Bowers T

Heather Derenick

1257 The Efficacy of Dry Cupping Therapy to Treat Musculoskeletal Pain and Function: A Systematic Review

Harrow J, Conner A, Grieve SM

Jaimie Harrow

- 1258 Potential Effects of Transcutaneous Electrical Nerve Stimulator on Long-Term Peripheral Hypoalgesia in Symptomatic Trigeminal Neuralgia: A Case Study and Proposal for Future Research**
Foucrier JP
Jeffrey Foucrier
- 1259 The Prevalence of Movement-Related Conditions in the Primary Care Setting**
Cornell J, Kareha S
Jenna Cornell
- 1260 Chronic Headache Self-Efficacy Scale (CHASE): Preliminary Assessment of Reliability**
Hankard J, Ginoza L, Sigman E, Kim B, Michener LA, Pozzi F
Jenna Hankard
- 1261 Antigravity Treadmill Training to Increase Functional Endurance in an Individual With Late-Onset Pompe Disease and Osteoporosis: A Case Report**
Fasching J, Bloom B, Tuttle L
Jennifer Fasching
- 1262 Use of Video in Clinical Movement Analysis: Current Practices and Perspectives of Physical Therapists**
Kretch K, Sigward S
Kari Kretch
- 1263 Differential Diagnosis of Low Back Pain in a Cancer Survivor: A Case Study Utilizing Mechanical Diagnosis and Therapy**
Duszak McArdle K, Packel L, Scanlon K, Hyon A
Kelly Duszak McArdle
- 1264 Is Cervical Neuromuscular Response to Head-Neck Perturbation Related to Cervical Musculoskeletal Characteristics?**
McCloskey K, Stuhldreher A, Bean R, Rudolph KS, Alsalaheen B

Kelly McCloskey

1265 Utilizing Patient Outcomes and Clinically Meaningful Change to Assess the Effectiveness of Residency Training

Naidoo K, Andreyo E, Jensen LA

Keshrie Naidoo

1266 Acute Exertional Rhabdomyolysis in a Patient Referred to a Physical Therapist for Thoracic Back Pain: A Case Report

Cadigan K, Elliott R, Bang M, Ross MD

Kristin Cadigan

1267 An Algorithmic Approach to Concussion Rehabilitation: A Case Series

Walston LW, Walston ZE, Yake DM

Lindsay Walston

1268 Effects of Localized Vibration on Flexibility: A Randomized Controlled Trial

Lepak LV, Allen TW, Robledo CA, Thompson DM

Louis Lepak

1269 Correlation of Self-Reported Outcome Measures and the Selective Functional Movement Assessment (SFMA): An Exploration of Validity

Riebel M, Szymanek E, Dolbeer J, Crowell M, Goss DL

Mark Riebel

1270 Perceived Impact of Orthopaedic Manual Therapy Fellowship on Professional Attributes and Involvement: A Survey Study

Shepherd M, Janicky T, Neilson BD, Garcia B, Stevens B, Whitman JM

Mark Shepherd

1271 Acute Exacerbation of Congestive Heart Failure (CHF) Following Total Hip Arthroplasty (THA) in the Outpatient Setting

O'Hara M

Michael O'Hara

- 1272 Physical Therapy Interventions for Anxiety-Induced Functional Gait Abnormality in a 43-Year-Old Woman With Functional Neurological Symptom Disorder**
Borman NP
Nicole Borman
- 1273 Prevalence of Orthopedic Pain With Console Video Game Use in Adults**
Marquez NS, Carr P, Louda D, Vicario NS, Vu D
Nicole Marquez
- 1274 The Unique Role of Physical Therapy in Substance Abuse Facility Programming: A Case Report**
Duvall M, Merger N, Ganley K
Nikki Merger
- 1275 Functional Rehabilitation of a Person With Transfemoral Amputation Through Guided Motor Imagery: A Case Study**
Matalon R, Vallabhajosula S
Rebecca Matalon
- 1276 Applicability of Blood Flow Restriction Training in Physical Therapy Practice: A Systematic Review of the Literature**
Ferraro R, Burdsall T, Jamal A, Kovalchek SJ, Kreckel M, Seto S, Stanaback W
Richard Ferraro
- 1277 Is There a Need for Routine Falls Risk Screening in the Outpatient Physical Therapy Setting?**
Sofer R, Hayes JG, Bender MB, Brady E, Minei M, Schachner J, Weber J
Roslyn Sofer
- 1278 Cognitive, Neurologic, and Processing Challenges and Strategies After Hip Hemiarthroplasty of an Adult With Sturge-Weber Syndrome**
Burkhardt S, Struessel T, Van Zytveld CR
Sarah Burkhardt
- 1279 Reliability and Validity of the HALO Digital Goniometer for Shoulder Range of Motion in Healthy Subjects**

Correll S, Hutchinson H, Field J, Mickevicius G, Smoot B, Fitzsimmons A
Sarah Correll

1280 Serial Assessments of Outcome Measures Show Change and Help Justify K3 Componentry in a Patient With Bilateral Amputations

Smith SC, Sions JM, Manal TJ
Sarah Smith

1281 Does Payer Type Impact Outcome Scores of Low Back Pain Patients Presenting to Outpatient Physical Therapy?

Bonkowski W
Wayne Bonkowski

1282 Successful Management of Long-Term Costochondral Impairments Through Manual Therapy and Specific Exercise: Resolving Secondary Compensations in Movement

Ochs ZN, MacDonald CW
Zane Ochs

1283 Rhomboid Minor and Major Muscle Thickness Changes With Positioning

Mitchell UH, Johnson AW, Seamons C, Larson RE
Ulrike Mitchell

Pediatrics

1284 A 3-Year Journey to Diagnosis of Hypophosphatasia in an Adolescent Male

Johnson AW, Bowden JA, Mitchell UH
Ulrike Mitchell

1285 Concurrent Validity of 2 Abbreviated Versions of the Gross Motor Function Measure in Young Infants With Neuromotor Delay

Hsu L, Chang H, Gregory A, Harbourne RT, McCoy SW
A. Whitney Gregory

1286 Innovative Multidisciplinary Intensive Therapy Program Positively Impacts the Lives of Children With Neuromotor Disorders

Wilson A, Woyte K, Hedgecock JB

Aimee Wilson

- 1287 Gait Training, Kinesiology Tape, and Pelvic Stabilization for a Child With Spastic Hemiplegic Cerebral Palsy**
Palermo A, DiBiasio P
Alec Palermo
- 1288 Effects of Activity-Based Video Games on Balance in Children With Disabilities: A Systematic Review**
Cole A, Porter A, Jeffries L
Alisa Cole
- 1289 Predicting Developmental Outcomes in Infants Born With Extremely Low Birth Weight**
Porter A, Andrew K, Kolobe TH
Amanda Porter
- 1290 Using the General Movements Assessment as a Clinical Standard of Practice to Improve Identification of Infants at High Risk for Neurobehavioral Sequelae**
Videmsek AS, Kunkel VA, Wendland MT
Amanda Videmsek
- 1291 A Quality Improvement Study to Optimize Documentation of Physical Therapy Dose in the Electronic Medical Record for Individuals With Cerebral Palsy**
Bailes AF, Strenk ML, Quatman-Yates C, Furnier A
Amy Bailes*
- 1292 Effects of Maternal Exercise on Infant Neuromotor Skills at 6 Months of Age**
McMillan A, Lee L, Spratt A, May LE
Amy Gross McMillan
- 1293 Functional Strengthening and Progressive Walking Training Leads to Independent Walking in a 5-Year-Old Child Diagnosed With Hypotonic Cerebral Palsy and a History of Infantile Spasms: A Case Report**

Sybesma A, Mattern-Baxter K
Amy Sybesma

1294 Using BESTest to Assess Postural Control in Children With Cerebral Palsy

Zarkou A, Prosser LA, Lee SC
Anastasia Zarkou

1295 Prematurity May Impact Problem-Solving Behaviors Across the First 2 Years of Life

Baraldi Cunha A, Babik I, Ross SM, Logan SW, Galloway J, Lobo MA
Andrea Baraldi Cunha

1296 Effect of the Hug N' Move Postural Support Garment on a Child's Posture, Attention, and Object Interaction During Play

Babik I, Baraldi Cunha A, Hall ML, Lobo MA
Andrea Baraldi Cunha

1297 An Incompetent Stool—A Physical Therapy Approach for Pediatric Constipation: A Pediatric Pelvic Health Case Report

Chang BA, Disney HL, Edwards AM
Anna Edwards

1298 Three-Dimensional Gait Analysis in Individuals With Mild and Severe Hemophilia

Rogozinski BM, Arnold M, Cicchillo M, Zhou Y, Dykhouse ML, Kesar T
Benjamin Rogozinski

1299 The Effect of Customized Ride-On Cars on Participation and Quality of Life in 3 Children With Disabilities: A Case Series

Ennis B, Hosking E, James J, Shelley E, Vardeman J
Beth Ennis

1300 Driven Gait Orthosis Influence on the Rectus Femoris and Semitendinosus in a Child With Crouch Gait

Scheidler CS, Nobbe J, Stanley S, Hart A, Jay K, Larson C, Tellus S, Bridgeman K, Goldsbury C, Fuller EM, Altenburger P
Capi Scheidler

- 1301** **Effects of a Structured Circuit Training Program on Strength and Function of a 10-Year-Old With Cerebral Palsy**
McGowan C, Senesac CR
Cassandra McGowan
- 1302** **Progression of Ankle Plantarflexion Contractures and Ambulatory Decline in Boys With Duchenne Muscular Dystrophy**
Kiefer M, Bonarrigo K, Quatman-Yates C, Fowler A, Horn P, Wong BL
Catherine Quatman-Yates
- 1303** **Factors Impacting Interprofessional Collaboration in Special Education**
Thompson CR, Lowenstein C, Paris J, Savery H, Schnelker A
Catherine Rush Thompson
- 1304** **Use of Standing Frames for Hip Preservation in Children With Cerebral Palsy: An Evidence-Based Algorithm to Guide Clinical Care**
Christensen C, Nyktas D, Rish A, Lumbaca L, Petras R, Rogers W
Catie Christensen
- 1305** **The Modified-Emory Functional Ambulation Profile: Convergent Validity in 5- to 11-Year-Olds**
Enslee CA, Pinto Zipp G, Deluca DA
Cheryl Enslee
- 1306** **Parents' Perceptions of Environmental Supports and Resources for Participation of Children With Cerebral Palsy**
Kerfeld CI, Wentz EE, Cicirello N, LaForme Fiss A, Bjornson K
Cheryl Kerfeld*
- 1307** **Optimal Sagittal Ankle-Foot Orthosis Alignment in Combination With Lower Extremity Strengthening and Progressive Walking Training Leads to Ambulation With a Walker in a Toddler With Polymicrogyria: A Case Report**
Cherng C, Mattern-Baxter K
Christina Cherng

- 1308 Ankle-Foot Orthosis Footwear Combination: Pilot Study Modulating Ground Reaction Forces to Optimize Lower Limb Kinematics in Ambulatory Children With Cerebral Palsy**
Villarosa C, Bjornson K, Apkon S, Fatone S, Orendurff M, Sienko-Thomas S, Do K
Christopher Villarosa
- 1309 Association Between Activity Participation and Quality of Life in School-Aged Children With Autism Spectrum Disorder**
Olzenak McGuire DL, Hyman SL, Fulk G, Van Wijngaarden E
Dana Olzenak McGuire
- 1310 Is Children’s Motor Learning of a Postural Reaching Task Enhanced by Practice in a Virtual Environment?**
Levac D, Jovanovic B
Danielle Levac
- 1311 Modified Ride-On Cars as Early Mobility for Children With Mobility Limitations: A Scoping Review**
James D, Pfaff J, Jeffries L
Dawn James
- 1312 The Use of Sensory Integration to Enhance Motor Planning During Physical Therapy in a Child With Cerebral Palsy**
Bowers J, Ardolino E
Elizabeth Ardolino
- 1313 Development of a Video Coding System for Postures and Motor Behaviors in Typically Developing Children and Children With Autism Spectrum Disorders**
Greeke E, Abbruzzese LD, Leeds DR, Goldman S
Emily Greeke
- 1314 Physical Activity and Walking Performance in Children With Cerebral Palsy**
Wentz EE, Kerfeld CI, Cicirello N, LaForme Fiss A, Bjornson K
Erin Wentz

- 1315** **Parents' Perceptions of Relationship Building and Competence After Administering an Intervention With Their Preterm Infant in the NICU**
Girolami GL, Oberg GK, Ustad T
Gay Girolami
- 1316** **Changes in Gait Kinematics After Treadmill Training in a Child With Agenesis of the Corpus Callosum**
Henderson GM, Beerse M, Wu J
Gena Henderson
- 1317** **Interventions to Improve Sensory and Motor Outcomes for Young Children With Central Hypotonia: A Systematic Review**
Paleg G, Livingstone R, Romness M
Ginny Paleg
- 1318** **Participant Experiences at Community and Clinic-Based Toy Adaptation Workshops**
Feldner HA, Israel S, Mollica M, Hendricks D, Caspi A, Steele KM
Heather Feldner
- 1319** **Goal Attainment Scaling to Measure Activity and Participation Level Changes in Young Children With Cerebral Palsy (CP)**
Carey H, Ferrante RL, Heathcock JC
Helen Carey
- 1320** **Early Exploration Ability and Participation in Young Children With Cerebral Palsy**
Farhadi H, McCoy SW
Hoda Farhadi
- 1321** **Service Delivery of PTs and OTs in Early Intervention: How Are We Doing?**
Chang H, Hsu L, McCoy SW, Harbourne RT
Lin-Ya Hsu
- 1322** **Participation in a Pediatric Adapted Gymnastics Program: Caregiver Perspectives**

Diermann J, Leonard A, Krug JB
Jeffrey Krug

1323 Participation in a Pediatric Adapted Triathlon: Caregiver Perspectives

Friesen KA, Diermann JT, Krug JB
Jeffrey Krug

1324 Gait Difference Among Children With Autism Spectrum Disorder Compared to Typically Developing Children: An Evidence-Based Review

Amaral JA, Moore MF, Allen DD
Jennie Amaral

1325 The Effects of Locomotor Training in Children With Spinal Cord Injury: A Systematic Review

Donenberg JG, Fetters L, Johnson R
Jennifer Donenberg

1326 Progression of Independent Mobility in a Child With Down Syndrome

O'Loughlin J, Wong S
Jennifer O'Loughlin

1327 The Effects of Curriculum-Based Physical Activity on Improving Measures of Fitness in Children 4-11 Years Old

Amanda K, Dzurino D, Davalos C, Tucker J
Jennifer Tucker

1328 The Impact of a Harness System on Participation of Children With Motor Impairments in the Young Athletes Program

Ezekiel-Wilder F, Hines R, Pabian P, Tucker J
Jennifer Tucker

1329 Effects of Mild Daily Stress on Skeletal Muscle Contractility and Pathology in Male mdx Mice

Timmons J, Weber N, Sobolewski S, Houle M, Theisen A, Taylor H, Vang N, Wittry B, Lindsay A, Lowe DA
Jessica Timmons

- 1330** **Balance Testing in Typically Developing Youth**
Kaufman JH, Lynch A, McKavanagh C
Joshua Kaufman
- 1331** **A Fall Risk Screening Tool for Persons With Intellectual and Developmental Disabilities**
Maring JR, Alexander LM, Bliss J, Costello E
Joyce Maring
- 1332** **Forcing the Hand: Outcomes of a Center-Based Versus Home-Based Constraint Intervention in Children With Unilateral Cerebral Palsy**
Maring JR, Wentzell EM, Benjamin AT
Joyce Maring
- 1333** **Reversible Fiber Inexcitability and Strength Loss in Duchenne Muscular Dystrophy Following Repetitive Contractions**
Trost J, Chen M, Grames MM, Lindsay A, Kimberley T, Lowe D
Joyce Trost
- 1334** **Racial Disparities in Physical Therapy and Community Program Services in Children With Cerebral Palsy**
Lent K, McCoy SW
Kathryn Lent
- 1335** **The Impact of an Adapted Rock Climbing Program on Quality of Life and Self-Efficacy in Adolescents With Autism Spectrum Disorder**
Oriel KN, Kanupka JW, Chappell S, Cummings R, Gambini A, Shuty J
Kathryn Oriel
- 1336** **Exploring the Gross Motor Play Habits of Young Children With Down Syndrome: A Descriptive Pilot Study**
Martin KS, Grevengeod C, Colin K, Shear B, Smith E, Terlep M
Kathy Martin
- 1337** **Effect of Functional Strength Training to Improve Arm Function in Children With Cerebral Palsy: A Case Study**

Clackum L, Fayyaz F, Gordon T, Lansing K, Chen Y, Garcia-Vergara S, Howard A, Weissman B, Hallman-Cooper J
Katie Lansing

1338 Interrater Reliability of Cervical Motion and Strength Measures in Infants With Congenital Muscular Torticollis

Greve KR, Sweeney J, Bailes AF, Van Sant AF
Kelly Greve

1339 Harnessing Participation: Use of a Novel Body Weight Support System in an Early Childhood Education Classroom

Gagnon K, Craft M, Duren M, Lashbrook B, Prickel A, Maggie T, Schulte D
Kendra Gagnon

1340 Vestibular Rehabilitation in Children Following Concussions

Nixon-Cave K, Jackson-Coty J, Master C, Grady M, Goodman A, Wiebe D, Storey EP, Baste L
Kim Nixon-Cave

1341 Tolerability of Aerobic Therapy in Post Concussion Syndrome Patients Ages 5-18

Nixon-Cave K, Jackson-Coty J, Master C, Grady M, Goodman A, Wiebe D, Storey EP, Baste L
Kim Nixon-Cave

1342 Development of Student Goals That Address Participation Within the Context of School Activities or Routines: Therapists' Experiences and Perspectives

Wynarczuk K, Chiarello LA, Fisher K
Kimberly Wynarczuk

1343 Algorithm for Early Mobilization in the PICU

Tyagi K
Kinshoo Tyagi

1344 Robotic Exoskeleton Use in the Chronic Stroke Population: A Pediatric Case Study

Cooley K, Dunn L, Kaloustian K, Kurland J
Kristin Cooley

1345 Robotic Exoskeleton Use Following Selective Dorsal Rhizotomy and Chronic Stroke: A Review of Two Pediatric Case Studies

Cooley K, Dunn L, Kurland J, Kaloustian K
Kristin Cooley

1346 Upper Extremity Strengthening for an Individual With Dyskinetic (Athetoid) Type Cerebral Palsy: A Case Report

McElhaney L, Senesac CR
Laura McElhaney

1347 Body Weight Support Treadmill Training (BWSTT) for a Non-ambulatory Child With Cerebral Palsy Who Is Blind

Blankenship C, Lowe L
Leah Lowe

1348 Utilization of Animal-Assisted Therapy to Improve Pediatric Response to Pain and Engagement During Outpatient Therapy Intervention: A Mixed Methods Complex Case Report

Kerr L, Agapay C, Facktor JM, Fife M, House KE, Bareiss SK
Leann Kerr

1349 Early Intervention Treadmill Training Improves Gross Motor Development in a Child With Prader-Willi Syndrome: A Case Report

Donner LF
Lillian Donner

1350 Fitness, Wellness, and Health Promotion: What Are Pediatric Physical Therapists Doing?

Elchert L, Lammers J
Lindsay Elchert

1351 Parental Perception of Child's Fitness Status Compared to Measured Fitnessgram and BMI Scores

Elchert L, Eliason A, Lasky M, Ruffing T, Sweeney M

Lindsay Elchert

- 1352 The Impact of Power Mobility on EEG Activity in Children With Multiple, Severe Disabilities: A Pilot Study**
Kenyon LK, Farris JP, Aldrich NJ, Usoro J, Rhodes S
Lisa Kenyon
- 1353 Customized Active Video Games for Youth With Cerebral Palsy: Parent and Youth Perspectives**
O'Neil ME, Shewokis PA, Lennon N, Finnegan AG, Gray RC, Diefenbach PJ
Margaret O'Neil*
- 1354 Kids R Us: Authentic Engagement Links Theory to Practice**
Birkmeier M, Plack MM, Wentzell EM, Maring JR
Marisa Birkmeier
- 1355 Efficacy of an Interdisciplinary Enrichment Program for Children With Developmental Coordination Difficulties: A Pilot Randomized Controlled Trial**
Davenport M, Rybski D, Voss J, Richter D, Plank N, Savell M, Jaramillo JV, Prus J, Thoelecke C, Ranheim D
Mary Jo Davenport
- 1356 Physical and Occupational Therapists' Perceptions of Procedural Pain in Children: A Pilot Study**
Swiggum MS, Chuor S, Dinofa C, Rehn JB, Shiramizu S
Mary Swiggum
- 1357 What Difference Can a Little Collaboration Make? Developing a Center of Excellence for Children With Cerebral Palsy in Tula, Russia**
Barkocy M, Morzova T, Shilina S, Zherebtsova V, Ushakova S
Marybeth Barkocy
- 1358 Investigating the Needs of Parents of Premature Infants' Interaction in the Neonatal Intensive Care Unit**
Rinehimer M, Pinto Zipp G, Cahill T, Parasher RK
Maureen Rinehimer*

- 1359 The Impact of Body-Weight Supported Locomotor Training in a Toddler With GMFCS Level V Cerebral Palsy: A Case Study**
Flores M, Da Silva CP
Megan Flores
- 1360 The Effect of Perception-Action Approach on Respiratory Function in a Patient With Duchenne Muscular Dystrophy: Case Report**
Radlein M, Garcia TS, Moore JG
Melissa Radlein
- 1361 Body Structure and Function, Activity, and Participation Outcomes Following an Adaptive Bike Riding Program for an Adolescent Girl With Down Syndrome**
Flowers M, Stamp B, Yates CC, Lowe L
Meredith Flowers
- 1362 Conservative Management of Adolescent Idiopathic Scoliosis Using the Schroth Method on a Ballet Dancer: A Case Report**
Yang M
Michelle Yang
- 1363 Reach and Grasp in Infants and Toddlers With Hemiparetic Cerebral Palsy**
Torbet PE, Endres B, Schram M, Ramey S, Deluca SC, Darragh A, Heathcock JC
Paige Torbet
- 1364 Balance in Children With a History of Ponseti Correction for Congenital Talipes Equinovarus: Preliminary Results**
Berg-Poppe PJ, Gray J, Huber J, Walter C, Svien L
Patti Berg-Poppe
- 1365 Use of Robotic-Assisted Gait Training in a Patient With Hemiplegic Cerebral Palsy**
Gangwani P, Cardinal RE
Priya Gangwani

- 1366 The Effect of Exercise in a Pediatric Population With Duchenne Muscular Dystrophy: A Systematic Review of the Literature**
Curran R, Panis N, Barry M, Fries J, Case L
Rachel Curran
- 1367 The Relationship Between Developing Sitting Postural Control and Object Permanence in Infants With Neuromotor Disorders**
Harbourne RT, Chang H, Stankus J
Regina Harbourne
- 1368 Sit Matters! Differences Between Sitters and Non-sitters in a Cohort of At-Risk Premature Infants at Six Months Adjusted Age**
Willett SL, Childers M, Needelman H, Roberts HJ, Jackson B, McMorris CA
Sandra Willett
- 1369 The Effect of School-Based Physical Activity Programs on Academic Performance: A Systematic Review**
Jones SA, Ericson C, Exline K, Green M, Mann LD, York S
Sarah Jones
- 1370 Impact of Intensive Intermittent Physical Therapy Compared to Weekly Frequency on Functional Outcomes Among Children With Cerebral Palsy**
Jones SA, Babcock S, Krueger K, Lauff G, Perley A
Sarah Jones
- 1371 Can Children With Cerebral Palsy Decrease Movement Impairments During a Functional Task?**
Lehman S, Scholtes SA
Sarah Lehman
- 1372 Something to Be Desired: A Thematic Analysis of Desired Dimensions of Change in Client-Identified Goals**
Schwab S, Angeli J, Harpster K, Hanson E
Sarah Schwab
- 1373 Modified Ride-On Car as an Alternative to Traditional Therapy Intervention for a Child With Medical Complexity: A Case Study**

Wong S, Sevick M
Stacy Wong

- 1374 Movement Proficiency and Center of Pressure in Infants With and Without CP During Development of Prone Progression**
Twum-Ampofo NS, Porter A, Johnson LR, Fagg AH, Kolobe TH
Nana Twum-Ampofo
- 1375 Caregivers' Perceptions of Adaptive Bicycling Among Children With Disabilities**
Antee K, Chester V, Hardee J, Hoang T
Thuha Hoang
- 1376 Effects of Physical Therapy Versus Physical Therapy With Turtle™ on Head Shape in Infants With Plagiocephaly**
Atkins TD, Selby-Silverstein L, Leibrand A, Russen C
Tiffany Atkins
- 1377 Infant Treadmill Stepping: Parents Are More Than Just Along for the Ride**
Moerchen VA, Perez Z, Schiffman R
Victoria Moerchen
- 1378 Use of Yoga Exercises for Young Children With Down Syndrome**
Salem Y, Liu H, Young A, Tolbert M, Elokda A, Holmes C
Yasser Salem
- 1379 Effects of Aerobic Exercise for Children With Down Syndrome: A Systematic Review of Literature**
Salem Y, Jay N, Downing A, Cook R, Liu H
Yasser Salem
- 1380 The Effect of Early Intervention Physical Therapy Using the "Parent Empowerment Program" for Pakistani Children With Down Syndrome**
Habib Z, Sheikh MS, Azam IS, O'Neil ME
Zehra Habib

Women's Health

1381 Effectiveness of Physical Activity to Reduce Symptoms of Depression and Fatigue in the Postpartum Population

Simonds AH, Cortes J, D'Antico T, Hood BL, Rebilas M, Richards A, Rucker E, Taylor R

Adrienne Simonds

1382 Effects of a Pelvic Realigning Exercise Program Started Immediately After Child Delivery on Low Back and/or Pelvic Pain in Postpartum Women: A Randomized Control Study

Sakamoto A, Nakagawa H, Nakagawa H, Gamada K

Asuka Sakamoto

1383 Characteristics of the Adult Female Endurance Runner: A Survey

Rothschild CE, Gabriel S

Carey Rothschild

1384 Pelvic Floor Muscle Training in the Management of Postpartum Pelvic Floor Dysfunctions: A Literature Review

Rothschild CE, Tanner RS

Carey Rothschild

1385 Tai Chi as an Intervention to Promote Quality of Life and Mobility for Women Who Are Morbidly Obese: A Pilot Study

Siegel SG, Stucker CL, DelVecchio MS, Hargreaves KT, King CD, Spencer JW, Turner AG

Cathy Stucker

1386 Effects of Female Sex Hormones and Estrogen Receptors on Physical Activity in Mice

Cabelka C, Collins BC, Spangenburg E, Lowe DA

Christine Cabelka

1387 Comparison of the Pelvic Girdle Questionnaire and the Timed Up-and-Go to Assess Pregnant Women With Pelvic Pain

Buhrow C, McDaniels L, Forehead S, Stevermer CA, Smith K

Catherine Stevermer

- 1388 The Effect of High-Velocity Low-Amplitude Thrust Manipulation of the Cervical Spine on Biomarkers Related to Stress and Pain Perception in Females With Mechanical Neck Pain**
Pacheco GR, Lohman EB
Gabriel Pacheco
- 1389 Comparing the Management of Postpartum Patients by Physical Therapists With Orthopedic or Women’s Health Clinical Specializations**
Enochs HK, Savage C, Slaven EJ
Hannah Enoch
- 1390 Satisfaction and Importance of Women’s Health Specialization: A Survey Study**
Sharp SA, Quesenberry JA, Stewart BR, Bostic DK, Irion JM
Jean Irion
- 1391 Fascial Scar Mobilization Techniques in Treating Chronic Caesarian Section Scar Pain: A Multi-center Randomized Clinical Trial**
Wasserman JB, Marcoux BC, Abraham KE, Massery M
Jennifer Wasserman*
- 1392 Identification and Physical Therapy Treatment of Axillary Web Syndrome Post Axillary Dissection: A Case Study Report**
Imundi J, Bustillo KL, Imundi M
John Imundi
- 1393 Could Pelvic Floor Dysfunction Be the Missing Link? Collaboration in the Physical Therapy Clinic to Treat Chronic Buttock and Hip Pain**
Divine K, McVey LW, Snyder C
Kate Divine
- 1394 Physical Therapy Management of a Patient With Breast Lymphedema Following Breast Cancer Treatment: A Case Study**
Ireland K, Borello-France D
Katherine Ireland

- 1395** **Managing Prolapse and Fecal Urgency With Fitness: Movement Control and Neuromuscular Re-education in Pelvic Floor Physical Therapy**
Dougherty K, Borello-France D
Kayla Dougherty
- 1396** **The Urine Stream Interruption Test: Is It Useful in Physical Therapy Management of Urinary Incontinence?**
Tusha KA, Bush S
Kelly Tusha
- 1397** **Optimism, Catastrophizing, and Pain-Related Anxiety in Women With Chronic Pelvic Pain: A Case Series**
Tusha KA, Bush S
Kelly Tusha
- 1398** **Prevention of Stress Urinary Incontinence in Pregnant Women Utilizing Pelvic Floor Muscle Therapy: A Systematic Review**
Burlini K, Busby C, Chase E, Evans C, Luetmer D, Pawloski R
Kristiana Burlini
- 1399** **Tarlov Cyst Pathology Mimicking Pudendal Neuralgia: A Case Report**
Liggan L
Lindsey Liggan
- 1400** **Pelvic Floor Impact Questionnaire to Evaluate Pelvic Pain in Pregnancy**
McDaniels L, Buhrow C, Stevermer CA, Smith K
Kari Smith
- 1401** **Effects of Toxic Stress on Maternal and Child Health-Related Quality of Life, Chronic Disease, Fetal Development, and Health Outcomes for Women and Children Living With Refugee Status: Comparisons From USA, Jordan, Lebanon, and Egypt**
Walton L, Zaeed N, Schbley BH
Najah Zaeed
- 1402** **The Efficacy of Pelvic Floor Muscle Training (PFMT) on Prolapse Symptoms in Women With Pelvic Organ Prolapse (POP)**

Bronson MK
Margaret Bronson

1403 Effect of Soft Tissue Mobilization Techniques on Pain and Function in the Abdomen: A Systematic Review

Copeland M, Upp M, Wasserman JB
Molly Copeland

1404 Physical Therapy Algorithm for Differential Diagnosis of a Patient With Chronic Orchialgia: A Case Report

Stefanowicz M, Bush S, Alappattu MJ, Comer B
Monika Stefanowicz

1405 Should All Physical Therapists Screen Patients for Pelvic Floor Dysfunction and Provide Basic Instructions in Strengthening These Skeletal Muscles That Do Not Require Internal Vaginal Evaluation?

Pottorf OA
Ofra Pottorf

1406 Effect of Aging on Function and Electromyographic Activity of the Pelvic Floor Muscles of Nulliparous Women: A Cross-Sectional Study

Driusso P, Ferreira CH, Pereira-Baldon VS, Avila MA, Bocardi DA, Beleza AS
Patricia Driusso

1407 Pelvic Floor Dysfunction and Clinical Measures: What Are the Relationships?

Nelson PR
Patricia Nelson

1408 Identifying Current Practice Patterns in the Rehabilitation of Transgender Patients Who Have Undergone Vaginoplasty

Wolk R
Rachel Wolk

1409 Improvements in Urinary Incontinence and Pelvic Pain With Trunk Stabilization Program and L5 Steroidal Injections

Vora S, Packia Raj L

Sagira Vora

1410 Establishing Best Practice Principles for Pregnancy-Related Diastasis Rectus Abdominis: A 3-Phase Consensus Study

Dufour SP, Bernard S, Murray-Davis B, Graham N

Sinéad Dufour

1411 Effects of Exercise on Women With Postpartum Depression: A Systematic Review of the Literature

Adams V, Volo J, Burnside A, Cross J, Kalafut M, Figuers C

Valerie Adams

Miscellaneous

1412 Confidence in, Knowledge of, and Muscle Activity When Learning Strength Testing Via Online Demonstrations Versus Classroom Lecture-Lab

Larson CA, Wenzlaff J

Cathy Larson

1413 Shoulder Range of Motion Changes in Asymptomatic Division III Collegiate Swimmers

Money K, Giveans R

Kate Money

1414 Characterization of Subjects With Shoulder Pain Based on the Painful Arc and Scapular Assistance Test

Ribeiro LP, Barreto RP, Camargo P

Paula Camargo

1415 Perspectives of Acute Care Clinical Instructors Regarding the Preparedness of Novice Physical Therapy Students for Safe Practice

Neumann CE, Haiduk B, Houck AD, Melli C, Oh H, Thomas D

Clara Neumann

Sports Physical Therapy: Knee

1417 Clinical Tests to Evaluate the Impact of Fatigue on Hop Performance in Healthy Individuals

White AK, Klemetson C, Farmer B, Katsavelis D, Bagwell JJ, Grindstaff TL
Allison White

1418 Assessing Injury Risk in Adolescent Female Soccer Using Concussion History and King-Devick Test

Harper B, Aron A, Leake B, Kopso A, Favale L, Atyam A
Ashley Kopso

1419 Between Session Reliability of Clinical Jumping Measures

Klemetson C, White AK, Katsavelis D, Farmer B, Grindstaff TL
Chelsea Klemetson

1420 Effectiveness of Microfracture Surgery on Improving Perceived Physical Function: A Systematic Review of Patient-Reported Outcomes

Logerstedt D, Andrews J, Pronzato S, Patel C
David Logerstedt*

1421 Isometric Knee Extension Measures Can Predict Isotonic 1 Repetition Maximum Performance

Anderson D, Lesnak J, Farmer B, Katsavelis D, Grindstaff TL
Dillon Anderson

1422 Ununited Bone Ossicle in a Patient With Patellar Tendinopathy

Beyer EB, Hewett TE, Jelsing E, Hurd W
Emily Beyer

1423 Hand-held Dynamometer Produces Valid Measures of Quadriceps Strength and Rate of Torque Development

Lesnak J, Anderson D, Farmer B, Katsavelis D, Grindstaff TL
Joseph Lesnak

1424 Reliability, Precision of Measurement, and Minimal Detectable Difference of Knee Extension Active Joint Position Sense Measurement Using a Smartphone in Uninjured Adult Agility-Sport Athletes

Clark NC, Hanington JL
Nicholas Clark

1425 The Effect of Exercise Intensity on Motor Learning of a Landing Strategy in Healthy Females

Grabowski PJ, Clevenger K, Danovsky B, Bishop A, McElderry L, Salaba J, Harvatine T, Jochman B

Patrick Grabowski

1426 Knee Injury Prevention Program Augmented With Mechanical Perturbation Improves Clinical Performance-Based Measures

O'Rourke P, Arundale AJ, Logerstedt D, Snyder-Mackler L

Patrick O'Rourke

1427 A Systematic Review: Are Lower Extremity Injuries More Prevalent in Athletes That Have Suffered Sports-Related Concussions?

Lesh S, Adams MR, Stafford TR, Thorp L, Parrish JK

Steven Lesh

Sports Physical Therapy: Knee-ACL

1428 Psychological and Functional Readiness for Sport Following Advanced Plyometric Training in Patients With Anterior Cruciate Ligament Reconstruction

Meierbachtol A, Paur E, Bottoms J, Obermeier M, Yungtum W, Chmielewski TL

Adam Meierbachtol

1429 10-Meter Timed Hop Test in a Healthy Population

Myers BA, Cowart A, Hawkins K, Ramos A, Waller J

Betsy Myers

1430 Loading Patterns After Anterior Cruciate Ligament Reconstruction Differ Based on Limb Dominance

Lee BS, Garrison J, Goto S, Creed K, Bothwell J

Bobby Jean Lee

1431 The Effect of Post-activation Potentiation on the Single-Leg Hop Test

Solie BS, Giveans R, Ames P

Braidy Solie

- 1432 Improved Knee Function and Confidence Following a 6-Week Neuromuscular Training Program for Athletes Attempting Return to Sport Following ACL Reconstruction**
Lewis CR, Pottkotter K, Glaws K, Wordeman S, Nagelli C, Hewett TE, Kaeding CC, Flanigan DC, Di Stasi S
Caroline Lewis
- 1433 Do Clinicians Prescribe Open Kinetic Chain Exercises During Rehabilitation Following Anterior Cruciate Ligament Reconstruction?**
Nwigwe C, Sigward S
Chukwuemeka Nwigwe
- 1434 Comparing Peak Hip and Knee Flexion During the Lateral Step-Down Test Between the Kinect V2 and Vicon: Examining Subjects With and Without ACL Reconstruction**
Echelmeyer D, Willis BW, Guess M, Guess TM, Sherman SL, Gray A, Blecha K
Dave Echelmeyer
- 1435 A Survey of Anterior Cruciate Ligament Reconstruction Rehabilitation Clinical Practice Patterns: Part 1—Time Criteria and Strength Assessment**
Greenberg E, Greenberg E, Albaugh J, Storey EP, Ganley TJ
Elliot Greenberg
- 1436 A Survey of Anterior Cruciate Ligament Reconstruction Rehabilitation Clinical Practice Patterns: Part 2—Functional Performance Measures and Functional Outcome Surveys**
Greenberg E, Greenberg E, Albaugh J, Storey EP, Ganley TJ
Eric Greenberg
- 1437 Anterior Cruciate Ligament Reconstruction Rehabilitation Clinical Practice Patterns: A Survey of the PRISM Society**
Greenberg E, Greenberg E, Albaugh J, Storey EP, Ganley TJ
Eric Greenberg
- 1438 The Effect of Weight-Bearing Dorsiflexion Range of Motion on Lower Extremity Kinematics During a 45-Degree Cut**
Butler L, Milian EK, Deverna A, Oh J, Eltoukhy M, Gimenez C

Eryn Milian

1439 Psychometric Evaluation Using Rasch Analysis of Patient-Reported Quality of Life Post ACL Reconstruction

Hunnicutt JL, Gregory C, Pietrosimone B, Hand B, Velozo C

Jennifer Hunnicutt

1440 A New Hop Symmetry Criterion Measure for Return to Sport After ACLR

Johnson JL, Arundale AJ, Smith AH, Snyder-Mackler L

Jessica Johnson

1441 The Prediction of Functional Outcome Using Strength and Weight Shift Asymmetries in Patients Post ACL Reconstruction

Pabian P, Boyd J, DeRosa V, Makarov R

John Boyd

1442 Knee-Related Function at the Time of Return-to-Sport After ACL Reconstruction Is Associated With Function and Physical Activity Five Years Later

Kirchmer JP, Ithurburn MP, Thomas S, Hewett TE, Huang B, Paterno MV, Schmitt LC

Justin Kirchmer

1443 Self-Reported Functional Measures Correlate With Isometric Knee Flexor Strength 3 Months After Pediatric ACL Reconstruction: A Preliminary Analysis

Thatcher KE, Ithurburn MP, McNally MP, Selhorst M, Beran MC, Klingele K, Schmitt LC

Karen Thatcher

1444 Analysis of Frontal Plane Movement Asymmetries Observed With Two-Dimensional Motion Analysis During a Single Limb Hop After Anterior Cruciate Ligament Reconstruction

Pottkotter K, Lewis CR, Di Stasi S, Schmitt LC, Paterno MV, Hewett TE

Kristy Pottkotter

1445 Early Quadriceps Strength Predicts High-Risk Biomechanics and Contralateral ACL Injury After ACL Reconstruction and Return to Sport

Paterno MV, Ithurburn MP, Thomas S, Schmitt LC

Mark Paterno

1446 Tracking and Baseline Clinical Predictors of Change in Knee Function Over Two Years in Young Athletes After ACL Reconstruction

Ithurburn MP, Paterno MV, Thomas S, Pennell ML, Evans KD, Magnussen RA, Schmitt LC

Matthew Ithurburn*

1447 Tracking and Baseline Clinical Predictors of Change in Landing Symmetry Over Two Years in Young Athletes After ACL Reconstruction

Ithurburn MP, Paterno MV, Thomas S, Pennell ML, Evans KD, Magnussen RA, Schmitt LC

Matthew Ithurburn*

1448 Limb Asymmetry in Knee Flexion Rate of Peak Torque Development in Patients Who Suffer Graft Rupture After ACL Reconstruction

Marks ME, Schmitt LC, Thomas S, Paterno MV

Megan Marks

1449 Quadriceps Strength and Single-Leg Vertical Jump Performance Following Anterior Cruciate Ligament Reconstruction

Chaput M, Farmer B, Anderson K, Wichman CS, Turman KA, Katsavelis D, Grindstaff TL

Meredith Chaput

1450 Task Demands and Biomechanical Analysis of Performance During the Single-Leg Hop for Distance Test After ACL Reconstruction

Dettman DL, Johnson AR, Mischke JJ, Mizner RL

Ryan Mizner*

1451 Comparing Males and Females for Effects of Fatigue on Quadriceps and Hamstrings Isokinetic Strength Profile in Adolescent Post-op ACL Reconstruction Patients

Baheti N, Gutierrez S, He S, Lam K, Yamamoto M

Neeraj Baheti

- 1452 Articular Cartilage Fracture With Anterior Cruciate Ligament Tear: Atypical Presentation Calls for Immediate Referral**
Ioffredi D, Twitty M, Hunt S, Ceballos A
Shawn Hunt
- 1453 A Novel Analysis of Return-to-Play Criteria at 6 Months Following ACL Reconstruction**
Chiaia TA, De Mille P, Lalani A, Nguyen JT, Altchek DW, Allen A, Tao M, Pais MD, Williams RJ
Theresa Chiaia
- 1454 Impairments Distal to the Hip Are Associated With Peak Hip Adduction During Single-Leg Landings After ACL Reconstruction**
Crippen TJ, O'Donnell HR, Quiñones FJ, Mizner RL
Thomas Crippen
- 1455 The Association Between Knee-Related Confidence and Fear of Re-injury at Return-to-Sport and Functional Outcomes at One Year After Return-to-Sport Following ACL Reconstruction**
Rethorn T, Ithurburn MP, Thomas S, Paterno MV, Schmitt LC
Timothy Rethorn
- 1456 No Difference Between Mechanical Perturbation Training With Compliant Surface and Manual Perturbation Training on Knee Functional Performance After ACL Rupture**
Nawasreh ZH, Logerstedt D, Failla M, Snyder-Mackler L
Zakariya Nawasreh

Sports Physical Therapy: Running

- 1457 A Systematic Review: Does the Use of a HIIT Regimen Improve Cardiovascular Fitness at Different Rates for Males Versus Females?**
Fleer A, Church K, Coburn N, Garcia J, Grainger J, Lesh S
Amber Fleer
- 1458 The Effects of Training Volume on Overuse Injuries in Non-elite Triathletes**
Woodard C, Garcia RK, Akay D, Alberalla S, Faber C, Lee J, Reisman M, Starr C

Chad Woodard

- 1459 Patellofemoral Joint Loads Associated With High-Intensity Interval Training**
Hollingsworth CN, Meardon SA, Willson JD
Chelsea Hollingsworth
- 1460 Sleepy Runners: Measuring Sleep, Performance, and Injuries Among Runners**
Hopkins C, Harris J
Christopher Hopkins
- 1461 The Use of Clinical-Based 3D Running Gait Analysis for Guiding Gait Retraining in a Patient With Medial Knee Pain**
Adams D
Douglas Adams
- 1462 Does Step Frequency Affect Running Injury Incidence? An Observational Study With 12-Month Follow Up**
Szymanek E, Miller EM, Weart A, Morris J, Goss DL
Eliza Szymanek
- 1463 Examining Electromyography Activity of the Gluteus Medius and Tensor Fascia Latae During Barefoot and Shod Walking and Running**
Schindler G, Brinkman H, Cygan A, Fredericks C, Plemel RJ, Thorton E, Yanchek A, Relling DP
Gary Schindler
- 1464 Effect of Age and Pace on Ground Reaction Force Asymmetry in Recreational Male Runners**
Crosswell G, Thakkar B, Harrison KD, Morgan J, Williams D
Gregory Crosswell
- 1465 Ground Reaction Force Characteristics in Female Collegiate Cross-Country Runners With and Without a History of Bone Stress Injury**
Wayner R, Stephens J, Robinson R
Jacob Stephens

- 1466 The Hexagon Agility Test (HAT): Establishing Reference Data for Senior Athletes**
O'Connell JK, Haltinwanger KL, Miller SN, Shaver CE, Yezak RD
Janelle O'Connell
- 1467 Plantar Loading Differences Between Trail, Treadmill, and Sidewalk Running Surfaces**
Ogston JK
Jena Ogston
- 1468 Introducing Physical Therapy Students to the Military Tactical Athlete Through ROTC Screening Events**
Herring JA, Dunleavy K, Williams S, Vollmar T
Jessica Herring
- 1469 Ability of Move2Perform Software to Identify Injury Risk in Division II Collegiate Athletes**
Rose J, Avery A, Huegel M, Robinson JL, Sjoerdsma D, Smith CO, Wise C
Jon Rose
- 1470 Running Intensity and Tibial Bone Stress**
Meardon SA, Bartol K, Chilton M, Mazyck C, Willson JD
Karleen Bartol
- 1471 Summer Training Factors and Running-Related Injury Risk in High School Cross Country Runners**
Luedke LE, Heiderscheit B, Williams D, Rauh MJ
Lace Luedke
- 1472 The Relationship of Psychosocial Factors With Time Missed From Injury in Division 1 Varsity Collegiate Track and Field Athletes**
Wong ML, Ruiz JT, Anible B, Hoekstra DJ, Malave TN, Swinson R, Negishi N, Boucher T, Cahalin LP, Best T, Feigenbaum LA
Deborah Hoekstra

- 1473** **Triceps Surae Activation During Walking and Running Post Achilles Tendon Rupture**
Corrigan P, Zellers JA, Silbernagel KG
Patrick Corrigan
- 1474** **Gait Modifications With Lower Body Positive Pressure System**
Culbertson RL, Gedlinske AM, Suydam SM, Macaulay M, Evans M
Renee Culbertson
- 1475** **Objective Musculoskeletal Assessments That Predict Injury in Runners: A Systematic Review and Meta-Analysis**
Christopher SM, McCullough J, Snodgrass SJ, Cook CE
Shefali Christopher

Sports Physical Therapy: Sports Residency

- 1476** **A Comprehensive Movement Approach to Prevent Injury and Enhance Performance in Collegiate Cross Country Runners: A Case Study**
Englert A, Plisky PJ, Kiesel K
Alyssa Englert
- 1477** **Muscle Force and Kinematic Asymmetries in Collegiate Cross Country Runners: A Descriptive Laboratory Study**
Kupper AJ, Weber A, Vannatta CN, Kernozek TW, Rutherford DN
Andrea Weber
- 1478** **Generalized Joint Hypermobility Influences Treatment Type But Not Functional Outcome in Young Instability Athletes**
Pellett AA, Shanley E, Kissenberth M, Hawkins RJ, Tokish JM, Thigpen CA
Charles Thigpen
- 1479** **Utilization of Limb Symmetry Index After ACL Reconstruction: What Is the Standard?**
Lefever CR, Abellanida M, Lowe W, Duncan BR, Bailey LB
Christopher Lefever
- 1480** **Changes in Lower Extremity Biomechanics Following Sport-Related Concussion: A Case Series**

Wozobski E, Garrison J, Hannon J, Giesler L, Grondin A, Creed K, Goto S
Emily Wozobski

1481 Evaluation of Acute Versus Chronic Workload of an Interval Throwing Program

Valls GI, Shanley E, Evans D, Kissenberth M, Thigpen CA
Garrett Valls

1482 Functional Performance Testing as a Predictor of Player Performance in a Collegiate Women's Basketball Team

Fath J, Clifton D, Onate J
Jennifer Fath

1483 Utilization of Direct Access and Dry Needling for Management of an In-Season Runner With Lateral Hip Pain

Lewis J, Atwood J, Windley T
Jessica Lewis

1484 Effect of Lower Body Positive Pressure Treadmill on Step Rate Manipulation

Oakland J, Ames P, Giveans R
Josie Oakland

1486 Clinical Assessment Techniques for Injury Risk Assessment in Elite Swimmers: A Systematic Review

Schlueter K, Pintar J, Wayman K, Hartel L, Briggs MS
Kaitlyn Schlueter

1487 Medical Management of Post-concussive Syndrome in an Elite Hockey Player

Lynch KE, Mulligan EP, Middleton E
Katherine Lynch

1488 The Relationship Between Range of Motion, Strength, Motor Control, Power, and the Tennis Serve in Competitive Level Tennis Players: A Pilot Study

Palmer K, Morgan C, Jones D, Zeppieri G

Kenneth Palmer

1489 Exploring the Utility of Video Playback Technology and Standard Learning Measures to Enhance Mentorship Within a Sports Residency Simulation

Greenwood KC, Clark SB, Nolan DC

Kristin Greenwood

1490 Self-Reported Concussion Management in Martial Arts Fighters

Lou L

Lauren Lou

1491 Workload Ratios and Time-Loss Injury in Division I Women's Lacrosse Players

Brown L, Avey M, Taylor C

Liz Brown

1492 Musculoskeletal Ultrasound as a Screening Tool to Determine Injury Risk in Sports: A Systematic Review

Christopherson Z, Faherty MS, Ledbetter L, Boggess B, Sell TC

Zachary Christopherson

1493 Is Peak Torque Enough? The Relationship Between Isokinetic Testing and Single Leg Hop Performance in Patients Following ACL Reconstruction

Abellanida M, Lefever CR, Duncan BR, Lowe W, Juneau C, Paine R, Bailey LB

Melissa Abellanida

1494 Direct Access Management of a Youth Baseball Player With Elbow Pain

McClain N, Atwood J, Windley T

Nathan McClain

1495 Pre-season Assessment to Determine Injury Risk in Adolescent Rugby Players

Melfi N

Nicole Melfi

1496 Hip and Hamstring Strength in Young Athletes With Quadriceps Strength Deficits After ACL Reconstruction

Therriault PM, Ithurburn MP, Thomas S, Paterno MV, Schmitt LC
Patrick Therriault

1497 A Controlled Interval Throwing Progression for Javelin Athletes Following Injury: A Clinical Commentary

Fronek S
Shanon Fronek

1498 A Systematic Review: What Is the Impact of Cupping Therapy on Pain Modulation in Both Athletic and Non-athletic Populations?

Lesh S, Jue J, Toennies C, Susmilch M, Behrouz S
Steven Lesh

Group 2: Friday, February 23

Cardiovascular and Pulmonary

2001 Clinical Diagnosis of Peripheral Vascular Disease: A Physical Therapy Resident's Case Problem

Milian A, Wong M, Cohen M, Glynn TK, Kirk-Sanchez NJ
Alexyz Milian

2002 Muscle Endurance Measures Using Isokinetic Dynamometer and NuStep

Thornton A, Kosky J, Gasperoni V, Lowrey L, Varghese A, Galen S, Pepin ME
Alyssa Thornton

2003 The Effect of Circuit-Based Exercise on VO₂peak of Individuals With a Lower Limb Loss

Bartlett AS, April S, Hart E, Gilmore A, Sowyrda K, Strohmeyer S, Trainor K
Andrew Bartlett

2004 Correlation of Pre-surgery Frailty-Related Measurements With Post-transplant Outcomes in Patients After Lung Transplant

Henning A, Gaines KM, Morris PE, Baz M, Villasante Tezanos A, Shafii A, Johnson C, Lee JT, Evan C, Dupont-Versteegden EE
Angela Henning

- 2005** **The Effects of Respiratory Muscle Training on Exercise Performance and Maximum Oxygen Consumption in Athletes and Healthy Individuals: A Systematic Review**
Elmarakby A, DeRusso A, Fletcher-Foster AL, Fernandez M, Lord M
Ashraf Elmarakby
- 2006** **The Effect of Yoga-Inspired Breathing Training on Five Outpatient Pulmonary Rehabilitation Patients**
Sandona BJ, Gissen A
Benedict Sandona
- 2007** **Effects of Exercise Training in Patients With Chronic Heart Failure: An Updated Systematic Review**
Belarmino BC, Mitchell K, Gleeson PB, Lin S, Mondkar RS
Bobby Belarmino
- 2008** **The Role of PT When (Repeat) Lung Transplantation Is No Longer an Option: A Case Study**
Anderson B, Cohen M
Brady Anderson
- 2009** **The Impact of High-Intensity Interval Training in Adolescents: A Pilot Study**
Wilck C, Moree S, Schultz A, Mitchell R, Brandt K, Weir A, Bailey S
Cara Wilck
- 2010** **Cardiovascular Response to Skeletal Muscle Afferent Activation in Women and Men**
Mickelson CM, Meister M, Nelson H, Nichols J, Asirvatham-Jeyaraj N, Chantigian D, Keller-Ross ML
Chad Mickelson
- 2011** **Bilateral Hip Heterotopic Ossification Following Lung Transplantation**
Carpenter CJ, Hodde M, Menard R, MacFarlane S, Altschuler E
Christina Carpenter

- 2012 Accuracy of 6 Activity Monitors During the 6-Minute Walk Test to Measure Distance and Steps Walked**
Towler C, Fulk G, LaRue J, Bronson H, LeCours B, Boolani A
Christopher Towler
- 2013 Accuracy of 4 Activity Monitors During the 6-Minute Walk Test to Measure Caloric Expenditure and Heart Rate**
Towler C, Fulk G, Bronson H, LeCours B, LaRue J, Boolani A
Christopher Towler
- 2014 Implementation of a Safe and Feasible Mobilization Protocol for Patients POD 0 Transcatheter Cardiac Valve Procedures**
Ward J, Hernandez Z, Freund D
Danielle Freund
- 2015 The Prediction of Hba1c From Quality of Life Factors in Patients With Type II Diabetes Mellitus**
O'Connell DG, Armstrong MJ, Adams L, Borrego JR, Clark E, Roper B, Flores E, White F, O'Connell JK
Dennis O'Connell
- 2016 Patients' Perspectives Regarding Ankle-Foot Orthoses to Improve Walking Mobility for People With Peripheral Artery Disease**
Choma EA, Mays RJ, Mizner RL, Santasier AM
Elizabeth Choma
- 2017 Reliability and Validity of the Instant Heart Rate App in Healthy Populations**
Baldwin B, Chatham C, Mayeux P, Eason JM
Jane Eason*
- 2018 Inspiratory Muscle Strength and Endurance in Veterans With COPD: Impact on Functional Exercise Capacity**
Khani J, Giordano C, Dickens A, A Campos M, Cahalin LP, Formiga M
Jessica Khani

- 2020** **Applying Clinical Decision Rules in a Patient With Venous Thromboembolism (VTE) After an Elective Total Knee Arthroplasty**
Heick J
John Heick
- 2021** **Evaluating the Effects of a Cardiac Rehabilitation Program Gender-Tailored for Women With Coronary Artery Disease: A Systematic Review**
Conniff R, Papa A, Parry A, Sanko JP
John Sanko*
- 2022** **A Systematic Review of the Effects of Robotic-Assisted Stepping to Increase Cardiovascular Fitness in Individuals With Incomplete Spinal Cord Injury**
Dole A, Engel CM, Janusko E, Sanko JP
John Sanko*
- 2023** **Assessment for the Modulation of Pace and Distance in Response to Musical Auditory Cueing During Treadmill Exercise in Healthy Individuals**
Kume J, Deremer A, Helleckson M, Insardi D, Liu X, Melisurgo K, Hagan L
June Kume
- 2024** **Comparison of the Åstrand-Rhyming and Six-Minute Walk Tests for Predicting Maximal Oxygen Consumption in a College-Aged Population**
Pata R, Hochadel K, Martin T
Katelyn Hochadel
- 2025** **Differences in Clinical Markers of Exercise Intensity Between Males and Females During a Steady State Exercise Test**
Karch K, Applegate J, Nordquist L, Gurovich AN
Katie Karch
- 2026** **Physical Rehabilitation Research in Acute Care Settings of Low- and Middle-Income Countries: A Systematic Review**
Battle K, Daorai A, Javed H, Vicik L, Bettger J, Landry M, Pastva AM
Annie Daorai

- 2027 Inspiratory Muscle Performance of Division I Collegiate Female Swimmers: A Descriptive Analysis**
Graves K, Patel N, Vogel B, Fraga K, Ali A, Mandel D, Cahalin LP
Kyle M Graves
- 2028 Inspiratory Muscle Training Combined With Pilates-Based Physical Therapy in an Older Woman With Hemi-diaphragm Paralysis: A Case Report**
Burns Robertson MT, Garcia KL, Tischenko PK, Cahalin LP
Lawrence Cahalin*
- 2029 Reliability of the Six-Minute Walk Test With Supervision**
Elledge H, Pomaville D, Ciccarelli CA, Divine K, Dublin J, Hale SA, Liverman P, Price M, Routzahan J, Scheulen K, Tripp M, McVey LW
Lisa McVey
- 2030 Use of Body-Weight Supported Treadmill Training to Facilitate Mobility in a Patient With a New HVAD Who Had Intra-operative Neurologic Complications**
Rough K, King M
Marylynn King
- 2031 Accuracy of Heart Rate and Oxygen Saturation Measurements With Alternative Side-to-Side Position Obtained With a Pulse Oximeter**
Chatellier M, Lapier J, Yaremko K
Megan Chatellier
- 2032 Indicators of Balance Deficit Among Individuals Entering Cardiac and Pulmonary Rehabilitation Programs**
Cohen M, Jeffries KK, Heller G, Sewell S, Kim Y, Milian EK, Firmeza J, Gempel S, Gonzalez M
Meryl Cohen
- 2033 Diaphragmatic Neuromuscular Re-education for Increased Chest Wall Excursion in a 21-Year-Old Female Diagnosed With Friedreich's Ataxia: A Case Report**
Ward CR, Sawtelle M, Ferreira G

Michelle Sawtelle

- 2034** **Prevalence of Urinary Incontinence in Patients With Chronic Pulmonary Diseases: A Retrospective Review of Data for Quality Improvement**
Bauer N
Naomi Bauer
- 2035** **Exploration of Acute Care Physical Therapy Interventions for Critical Illness Myopathy in a Patient With Left Ventricular Assist Device Implantation**
Waner N
Nicole Waner
- 2036** **Physiotherapists' Description and Perceptions of Wound Protection and Arm Activity Restrictions Following Median Sternotomy: An International Perspective**
Lapier T, Perilli P, Solly K, Parton E
Paige Perilli
- 2037** **Cardiometabolic Biomarkers, Physical Function, and Activity in Women With Arthritis Who Completed a 30-Month Web-Based Weight Loss Intervention**
Hageman PA, Yoerger M, Wellsandt E
Patricia Hageman
- 2038** **Cardiovascular Disease Screening in Physical Therapy Practice Across Different Settings: A Survey Study**
Severin RS, Wielechowski A, Phillips SA
Richard Severin
- 2039** **Acute Intermittent Hypoxia and Inspiratory Threshold Loading as Strategies to Enhance Inspiratory Muscle Function**
Ahmed S, Sutor T, Sajjadi E, Smith BK, Mitchell GS, Martin D
Shakeel Ahmed
- 2040** **Safety and Efficacy of Acthar Gel in an Outpatient Dialysis Population**
Giuffre S, Wetzel J, Pohle-Krauza R, Sarac E, Guy R

Suzanne Giuffre

- 2041** **Contrasting Pulmonary Vascular Responses to High-Intensity Interval Training for Rats With Mild Vs Severe Pulmonary Arterial Hypertension**
Blessinger JM, Kurzhal T, Studebaker S, Jay K, Long GM, Frump A, Lahm T, Brown M
Taylor Kurzhal
- 2042** **The Cardiovascular Effects of the Nintendo® Wii U and Microsoft® XBOX Kinect**
Ingenito T
Teresa Ingenito
- 2043** **Fit and Strong Together (FAST): The Results of a 12-Week Interdisciplinary Weight Management Program for the Underserved**
Brewer W, Partridge J
Wayne Brewer
- 2044** **Effects of Leg Press Exercise on Function and Balance in Persons With Chronic Obstructive Pulmonary Disease: A Case Series**
Wheless WA, Hawkins H, Rodgers W, Bailey S, Vallabhajosula S
William Wheless
- 2045** **An Investigation Into the Effects of Guided Relaxation on High-Frequency Heart Rate Variability in Collegiate Hockey Players**
Currie Zj, Bonacum TP, McPherson B, Osanitsch M, Pata R, Martin T, Kelley K
Zachary Currie

Clinical Electrophysiology and Wound Management

- 2046** **The Flipped Classroom in Physical Therapy—Leaving the Lecture Hall Behind When Learning Biophysical Agents**
Avin KG, Bayliss AJ
Amy Bayliss
- 2047** **Use of Negative Pressure Therapy and Electric Stimulation to Attempt Full Wound Closure in a Patient With an Ischial Tuberosity Pressure Injury and C4-C6 ASIA C Spinal Cord Injury: A Case Report**

Gomez AK, Wardell C
Arlyn Gomez

**2048 Post Peripheral Intravenous Infiltration and Extravasation Injury
Methodology: A Retrospective Study**

Odom BH, Lowe L, Yates CC
Brian Odom

**2049 Effect of Waveform on Electrically-Elicited Quadriceps Muscle Torque:
Monophasic Square Wave Pulses Versus Burst-Modulated Biphasic
Square-Wave Pulses**

Adams C, Scott WB, Couture J, Landwehr A, Spadaccini J, Violette R
Cheryl Adams

2050 Benefits of Vitamin C and Zinc to Improve Wound Care

Juneau C
Chris Juneau

2051 Survival Time of Staphylococcus Aureus on Ultrasound Transducer Heads

Levine D, Spratt HG, McDonald SS
David Levine*

2052 The “Lived Experience” as a Way to Facilitate Empathy Development

Wendland DM, Taylor D
Deborah Wendland*

**2053 The Use of Focus Groups to Design Patient-Centered Diabetes Prevention
and Health Promotion Programming for the Underserved**

Wendland DM, Lucado AM, Stillman MA
Deborah Wendland*

2054 Evidence Supporting Exercise to Promote Wound Healing

Caldwell C, Traylor EJ
Eddie Traylor

2055 The Effect of Including Exercise in the Plan of Care for Wound Healing

Jackson JD, Traylor EJ
Eddie Traylor

- 2056 The Effect of Functional Electrical Stimulation for Foot Drop on Gait and Walking in People With Multiple Sclerosis: A Systematic Review**
Dhruve RR, Haeuptle MC, Hegel A, Kutteroff D, Spinosi M, Wilbert S, Cohen ET
Evan Cohen
- 2057 The Effects of Electrical Stimulation on Gross Motor Function in Children With Cerebral Palsy: A Systematic Review**
Conklin A, Galema M, Indrikovic J, McGillen M, Mercurio D, Toomer A, Winter J, Cohen ET
Evan Cohen
- 2058 The Effectiveness of Dry Needling on the Reduction of Proximal Upper Quadrant Pain Using Cohen's D: A Systematic Review**
Adah F, Walalce G, Blount K, Cooksey K, Mitchell M, Rives A
Felix Adah
- 2059 Comparing the Reliability of the Tekscan A201 Sensor and Precise Gauge Sub-bandage Pressure Monitors: A Technical Report**
Mathews HW, Kearsse M, Wilson AW, McGowan M, Fritz SL
Harvey Mathews
- 2060 The Effect of Repeated Use on Electrode Conductivity: A Comparison of Common Electrode Types Over 20 Sessions**
Bellew JW, Jones E, Burkett B, Clark K, Kissel A, Murray C, Frilot C
James Bellew
- 2061 A Survey of Wound Management Curricula in United States Physical Therapy Education Programs**
Hale JC, Hettrick H, Vallabhajosula S, Lawson D
James Matthew Hale
- 2062 Trends in Biophysical Agents Curriculum in Entry-Level Doctor of Physical Therapy Programs Across the United States**

Greco JL, Lamberg EM

Jamie Greco

- 2063 A Comparison of EMG Output of 4 Lower Extremity Muscles During Selected Yoga Poses**
Kelley KK, Giannico KN, Lesnett G, Romano A
Kathleen Kelley
- 2064 Quality of Life in Individuals With an Integumentary Disorder**
Melendez E, Doherty D, Hornung M, Carroll WJ, Zhou K, Ross MD
Kehua Zhou
- 2065 Noncontact Low-Frequency Ultrasound Therapy and Deep Tissue Pressure Injuries: A Case Series**
Tan L, Kwan A, Monroy EP, Woelfel S
Lisa Tan
- 2067 The Short-Term Effects of Class 4 Infrared Laser Irradiation of the Anterior Forearm and Carpal Tunnel Region on Median Nerve Distal Motor and Sensory Latencies in Healthy Subjects**
Post RE, Dill J, Murray C, Hommer K, Phillips A, Woodside CF
Robert Post*
- 2068 Effect of Interferential Current in the Management of Musculoskeletal Pain: A Systematic Review**
Maissy SN, Skipper VH, Allen RJ
Sarah Maissy
- 2069 Clinical and Electrodiagnostic Findings in a Patient With C5-T1 Nerve Root Avulsions and Chronic Neuropathic Pain**
Shaffer SW, Koppenhaver NH
Scott Shaffer
- 2070 Pressure Ulcer Prevention Education in Long-Term Care: Nothing Butt the Basics**
McCallon S, Frilot C, Mahoney E, Horn BF, Rushing M, Zachry S, McGuffee M, Petrick T, Rogers S, Schaefer C, Dean E

Stanley McCallon

- 2071 Physical Therapy Treatment for Lower Extremity Necrotizing Fasciitis: A Functional Wound Management Approach**
Woelfel S, Kwan A, Frendewey R
Stephanie Woelfel
- 2072 The Use of Topical Olive Oil as an Effective Preventative Measure For Pressure Ulcers: A Systematic Review**
Krasucki LE, Pankey J, Serzan C, Vondercrone J, Collins TL
Tracey Collins
- 2073 Electrically-Elicited Quadriceps Muscle Torque: Comparison at Three Knee Angles**
Scott WB, Adams C, Fisher J, Fisher S, Jones K, Mathieu BV
Wayne Scott

Geriatrics: Health and Wellness

- 2074 Comfortable and Fast Gait Speeds Are Significantly Influenced by Strength and Balance**
Mantel A, Chizmar S, Haffke L, Trapuzzano A, Dawson N
Alison Mantel
- 2075 Using Data to Characterize a Skilled Nursing Facility Population: Preliminary Results to Inform Clinical Decision-Making Tools**
Gustavson A, Baym CL, Maurer D, Stolper S, Ruse R, Malone D, Stevens-Lapsley JE
Allison Gustavson*
- 2076 Associations Between Lower Extremity Strength and Physical Performance in Community-Dwelling Older Adults: Differences Among ACE Genotype Subgroups**
Goldberg A, Shuler K, Sucic JF, Talley S
Allon Goldberg
- 2077 Does Peak Propulsive Force Correlate With Double Support Stance Time in People With Knee Osteoarthritis?**

Na A, Ko M, Gugala Z, Buchanan TS
Annalisa Na

2078 Effect of Aging on Lower Quarter Y-Balance Test in Healthy Women 50-79 Years Old

Oostindie A, Shepherd J, Locke J, Vallabhajosula S, Stetts DM, Freund J
Autumn Oostindie

2079 Are Five-Times Sit-to-Stand Norms Different for Older Adults Who Meet Recommended Activity Levels?

Johansson C, Trieger K, Russell S, Stefan E, Hocevar K
Charity Johansson*

2080 Effectiveness of a Community-Based Fall Prevention Class in Changing Fall Risk Behaviors

Wellner C, Flinn NA, Shippee T
Christine Wellner

2081 Chronological Age and Functional Measurements Predict Dual Task Cost for Postural Sway While Using a Bimanual Task in Healthy Adults Across All Ages

Liuzzo DM, Plummer P, Stewart JC, Fritz SL
Derek Liuzzo

2082 Inertial Sensor and Kinematic Measures of Turning: Concurrent Validity in Older Adults With Cognitive Impairment

McGough EL, Kelly VE, Gries M, Deol J, Teri L
Ellen McGough

2083 Functional Circuit Training for Aging Adults to Improve Mobility, Balance, and Fall Recovery

Bruckman D, Condren K, Paris K, Pariser GL, Gillette PD
Gina Pariser

2084 Impairment and Activity Limitation Changes in Assisted Living Facility Residents Over the Course of One Year – A Pilot Study

Braden HJ, Larsen S, Luedeker R, Morgan C, Taylor CM

Heather Braden

2085 The Relationship of the Lower Quarter Y-Balance Test to Dynamic Balance Measures in Healthy Women 50–79 Years Old

Shepherd J, Oostindie A, Locke J, Vallabhajosula S, Stetts DM, Freund J
Jacob Shepherd

2086 The Effects of Tai Chi on Individuals With Type 2 Diabetic Peripheral Neuropathy: A Systematic Review

Hakey-Brusgul J, Vittone D, Woodworth T, Louis J
Janet Hakey-Brusgul

2087 Creating and Validating a Self-Reported Measure of Mobility Limitation for Community-Dwelling Older Adults

Haladay J
Jill Haladay

2088 The Impact of the Walk With Ease Program on Pain, Ambulation and Self-Reported Physical Function in Individuals With Lower Extremity Osteoarthritis

Mierzwicki J, Greer C, Good T, Reed D, Oriel KN
Justin Mierzwicki

2089 The Effectiveness of Multifactorial Fall Prevention Interventions in the Frail Community-Dwelling Population: A Systematic Review

Karnish K, Heller KE, Pearson J, Petz J, Yoder A, Brogan L
Kristen Karnish

2090 Is the Sit-to-Stand Test a Reliable Indicator of Mobility Decline in Middle-Aged Populations? Preliminary Analysis

Faber LS, Yoshida Y
Lauren Faber

2091 Benefits of Physical Therapist Involvement in a Community-Based Program to Reduce the Negative Effects of Arthritis

Apanaviciute G, Coots L, Hetzer J, Person A, Pariser GL, Kerr L
Leann Kerr

- 2092** **Impact of Two Group Exercise Programs on Fall Risk for People Who Participate in PACE, a Case Series**
Eagler L, Elam P, Elam SW, Bell A
Leeann Eagler
- 2093** **Characteristics of Community-Dwelling Older Adults Who Respond to a Timing and Coordination Group Exercise Program**
Coffman L, Perera S, Brach J
Leslie Coffman
- 2094** **The Relationship Between Frailty and Physical Performance Measures in Older Adult Medicaid Clients**
Danilovich M, Ciolino J, Diaz LE, Corcos DM
Margaret Danilovich*
- 2095** **Influence of Initial Limb Load and Hip Abductor-Adductor Muscle Performance on Lateral Protective Stepping in Younger and Older Adults**
Inacio M, Creath R, Rogers MW
Mario Inacio
- 2096** **Self-Reported Fall Risk Management and Falls Among Older Cancer Survivors in the Medicare Advantage Population**
Huang M, Godoshian M, Blackwood J, Pfalzer LA
Min Hui Huang
- 2097** **Demographic, Patient-Reported Health Outcome, and Cancer-Related Predictors of Falls in Older Breast and Prostate Cancer Survivors: A Retrospective Cohort Study of Surveillance, Epidemiology, and End Results-Medicare Health Outcomes Survey Linkage**
Huang M, Godoshian M, Blackwood J, Neuman E, Pfalzer LA
Min Hui Huang
- 2098** **Falls Risk and Utilization of Balance Training by Physical Therapists for Adults With Symptomatic Knee Osteoarthritis**
Anderson ML, Allen KD, Golightly YM, Hill CH
Monica Anderson

- 2099 The Effectiveness of TENS, PENS, and Electromagnetic Stimulation for Reducing Lower Extremity Pain Due to Diabetic Peripheral Neuropathy: A Systematic Review and Meta-analysis**
Kietrys D, Datorre J, Lopez A, Kaczka K, Kline M, Gandhi C, Wills DA
Morgan Kline
- 2100 Effectiveness of a Protective Stepping Class to Reduce Fall Risk in Community-Dwelling Older Adults**
MacCabe A, Jordre B, Inglis L, Stueven N, Emily J, Lesser E
Natalie Stueven
- 2101 Treating Urinary Incontinence With and Without Therapist Feedback Using the Wii FIT to Strengthen Pelvic Floor Muscles**
Cahoj PA, Cook JL, Warren CL, Shaw JL, Newton SC, Drake N, Dorrell C, Dierks J, Funderburk B, Domke A
Patricia Cahoj
- 2102 Are Older Adults With Balance Deficits Particularly Challenged by the Cognitive Timed Up-and-Go?**
Pohl PS, Bosch PR, Ganley K, Mayer JE, Gras LZ
Patricia Pohl*
- 2103 Pain Provocation and the Energy Cost of Walking: A Matched, Comparison Study of Older Adults With Chronic Low Back and Radicular Leg Pain**
Coyle PC, Pugliese J, Schrack J, Hicks GE
Peter Coyle
- 2104 Can We Make the Frail, Unfrail? The Case of a Patient Completing Cardiac Rehabilitation**
Smith R, Allsup K, Kellar G, Forman D
Rebecca Smith
- 2105 Association of the Patient Reported Outcomes Measurement System Scales With Physical Performance Measures in Patients With Chronic Kidney Disease**
Marcus RL, Thackeray A, Painter P

Robin Marcus

2106 Feasibility of Implementing a Fall Prevention Program Using Telemedicine and Interprofessional Collaboration: Lessons Learned From a Pilot Project

Brotherton SS, Brown D, VanRavenstein K

Sandra Brotherton

2107 Assessing Forward Head Posture, Balance, and Risk for Falls in Community-Dwelling Older Adults

Migliarese SJ, Anastopoulos JT, Burkhart J

Sara Migliarese

2108 Evaluating a Group Community Fall Prevention Program on Fear of Falling and Falls Efficacy

Lenahan S, Mangulabnan A

Shannon Lenahan

2109 Stepping-Up: Preventing Falls and Improving Mobility Among Community-Dwelling Older Adults

Dufour SP, Richardson J, Sinclair S, Ploeg J

Sinéad Dufour

2110 Process Improvement to Enhance the Care of Persons With Parkinson's Disease

Carp SJ, Bissett W, Breiner D, Dormann D, Maclin L, Reichenbach A, Zanette M, Carroll MA, Eaves-Lyter E

Stephen Carp

2111 Do Older Social Dancers Have Improved Static and Dynamic Postural Control When Compared to Non-dancers?

Gordon SP, Sidaway B, Deluca J, Freeland A, Ndamba K, Pineo T, Shanahan R

Suzanne Gordon

2112 Mild Cognitive Impairment (MCI) Is Predictive of Reduced Mobility and Walking Speed

Staples WH, Arvin K, Clifton L, Schrader T, Cram Z

William Staples

2113 Incorporating Health Promotion Into Outpatient Physical Therapist Clinical Practice: A Case Report

Rethorn ZD

Zachary Rethorn

2114 Moderators of the Relationship Between Participation in a Matter of Balance Program and Improved Balance Confidence

Sartor-Glittenberg C, Bison N, Fernandes S, Alexander JL, Bay C, Bordenave LM, Bordenave EL

Cecelia Sartor-Glittenberg

2115 Evaluation of an Academic-Community Partnership Project to Deliver a Matter of Balance (MOB) to Older Adults With Osteoarthritis in Low-Income Senior Housing

White L, Gubler C, Cochran V, Dowell D, Latham TM

Laura White

Geriatrics: Mental Health

2116 A Proposed Framework for the Role of Physical Therapy in a Multidisciplinary Approach to Treating Depression

Newton JH, VanDerwerker CJ, Ross RE, Seif GA, VanSwearingen J, Gregory C

Jennifer Newton

Geriatrics: Osteoporosis

2117 The Effects of a 4-Week Postural Intervention of Manual Therapy and Therapeutic Exercise on Posture and Pulmonary Function in a Healthy Older Woman: A Case Study

Laprea A, Welsh R, Khan M, Rojas J, Hughes L, Burnett R, Jang H, Khan MI

Adrianna Laprea

2118 Severe Neuropathic Glenohumeral Joint Resorption in an Older Woman Status Post Total Knee Arthroplasty: An Imaging Case Report

Safford D

Daniel W. Safford

2119 Relationship of Muscle Morphology to Power and Function After Hip Fracture

Eastlack M, Behre MK, Sisson K, Besser MP, Mangione KK, Craik RL
Marty Eastlack

Health Policy and Administration

2120 A Brief Intervention Model of Physical Therapy Within the Community Health Care Center

Sartor-Glittenberg C, Hodges C, Burch AL, Bay C, Ibarrola RT, Suniga-Cadavid M
Cecelia Sartor-Glittenberg

2121 Factors That Influence Selection of Initial Employment by New Graduate Physical Therapists

White L
Laura White

2122 Special Olympics Healthy Athletes® and Fall Risk in People With ID: An Innovative Community-Campus Partnership

Golub-Victor A, Fitzpatrick DF, Dodman M, Mazzone L, Ross BT
Ann Golub-Victor

2123 Health and Fitness Outcomes Among High School Adolescents From Medically Underserved Populations (MUP)

Nunez-Gaunard A, Jaffe LA, Kuik M, Mena J, Mezzasalma E, Mitchel R, Gaunard IA, Raya M
Annabel Nunez-Gaunard

2124 A Global Health Initiative for Teaching Pediatric Clinical Decision-Making Skills to Rwandan Physical Therapists: An Education Process Case Report

Clark K, Whalen CN, Kohls L, Musabyemariya I, Kayonga Ntagungira E, Mann M, Fisher S
Cara Whalen

2125 Filling the Gap! Pro Bono Care With Student Physical Therapists: A Pilot Study

Crandell C, Black JD, Dole RL, Palombaro KM

Catherine Crandell

- 2126 Survey on Utility of Yoga as an Alternative Therapy for Occupational Hazards Among Physical Therapists**
Szydlowski G, Rogers CJ, Drews K, Ross MD
Chelby Rogers
- 2127 Evaluation of International Service Learning Trips: Innovative Travel Blog Analysis**
Hager S, Wiese SM, Sherd K, Kerfeld CI
Cheryl Kerfeld*
- 2128 Sustainability of Student-Run Service Learning Organizations**
Coombs A, Rissman C, Kerfeld CI
Cheryl Kerfeld*
- 2129 Patient Independence and Falls Reduction in Inpatient Rehabilitation : A Team Approach**
Ness D
Debra Ness
- 2130 Does Active Goal Setting, as an Intervention, Improve Treatment Outcomes for Patients Receiving Physical Therapy? A Systematic Review**
Haladay DE, Calantoni A, Knight M, Moser G, Taylor B, Anderson S, Heintz M
Douglas Haladay
- 2131 Same-Day Physical Therapy Consults in a Neuromuscular Disease Physician Clinic: A Conceptual Model of Care**
Pucillo EM, McIntyre MM
Evan Pucillo
- 2132 Factors Affecting G-Code Prognostic Accuracy in Medicare Beneficiaries Receiving Outpatient Physical Therapy**
Hartley GW, Roach KE, Buisson VM, Fath P, Miller JR
Greg Hartley

- 2133 Team Work Makes the Dream Work: Interprofessional Collaboration in a Student-Run Pro Bono Clinic**
Krempasky J, Black JD
Jaclyn Krempasky
- 2134 Building Cultural Bridges: Health Promotion With the Hmong Community**
Anderson S, Falk CA, Gmitterko N, Reff TA, Ruhland K, Lojovich JM
Jeanne Lojovich*
- 2135 Development of a Balance Screening Program for Low-Income Older Adults**
Cooper CT, Eisenhuth R, Hansen R, Mattson T, Noll A, Van Der Weerd K, Lojovich JM
Jeanne Lojovich
- 2136 The Impact of Part-Time, Collaborative Integrated Clinical Experiences on Revenue and Patient Satisfaction**
Bell JJ, Ostertag SA, Levison DL, Carson JC
Jennifer Bell
- 2137 The Impact of a Community-Based Exercise Program on Somali Immigrants Residing in Subsidized Housing**
Miller JB, Sellheim DO, Mueller LC, Berggren K, Gerardi M
Jennifer Miller
- 2138 Transforming the Delivery of Total Joint Care**
Fenimore J, Smith L
Jill Fenimore
- 2139 Patient Outcome Measures From a Student-Run Pro Bono Physical Therapy Clinic Within an Academic Health System**
Segura JD, Vogel-Castellanos BL, Harris B, Botill K, Tsiknakis M, Dhah J, Kirk-Sanchez NJ, Glynn TK
Johanna Segura
- 2140 An Updated Profile and Earnings Analysis of US Physical Therapists**
Chevan J

Julia Chevan

2141 An Investigation of the Impact of Social and Physical Participation on the Quality of Life of the Elderly in a Nicaraguan Adult Care Center

Booth J, Ferrero S, Mascali K, Moriarty K, Giordano J

Julie Booth

2143 Marketing Services to Transform Society: How a Marketing Project Has Fostered Student Leadership Growth While Achieving Referral of Clients in Need of Pro Bono Service

Gilfillan J, Rutledge P, Harmon L, McDevitt M, Black JD

Justin Gilfillan

2144 Balancing Inclusion and Use of Outcomes Instruments in the Physical Therapy Outcomes Registry

Chesbrough K, Crockett R, Elrod M, Smith H, Irrgang JJ

Karen Chesbrough

2145 Physical Therapy Outcomes Registry: A Multidimensional Data Collection System

Chesbrough K, Crockett R, Elrod M, Smith H, Irrgang JJ

Karen Chesbrough

2146 Implementation of Patient-Centric, Interdisciplinary Virtual Handoffs Across the Post-acute Continuum

Baasch K

Kimberly Baasch

2147 National Fall Prevention Program in Trinidad and Tobago: A Collaborative Model

Nowakowski KA, Rauseo CM, Ottley CA, Pierre WM, Braga AJ, Fitzgerald EA, Levesque KF, Mulligan AE, Tomanio EA

Kimberly Nowakowski

2148 Pro Bono Clinic Management and Utilization Within Physical Therapist Education Programs in the United States

Steinbarger K, Morren KK, Goulet KA, Knecht S, Moscone M, Nicaastro E
Kimberly Steinbarger

2149 Leadership Education in Healthcare Professional Entry-Level Programs: A Review of the Literature

Thompson KA, Grix A, Stevenson A, Wideman M
Kristine Thompson

2150 Physical Therapy for Medically Underserved Residents in Rural America: A Short-Term Service Learning Experience

Smith K, Adams E, Brockman J, Erlandson A, Pariser GL, Kerr L
Kylie Smith

2151 The Utilization of Spinal Thrust Manipulation by Physical Therapists in New York State

Bicheler H, Guillermo K, Wolfley B, Walsh L, Brown M, Ross MD
Laurie Walsh

2152 New Solutions to an Old Problem: Reducing Falls in Inpatient Rehab

Cook L, Salazar R, Bauer S, Joyner M, Carlson TD
Leslie Cook

2153 Advocacy and Leadership Skills Developed Through an Innovative Curriculum Model

Johnston LB, Sekerak D
Lisa Johnston

2154 Implementing Mobile Health Technology in the Patient-Centered Medically Oriented Gym Setting to Activate Patients With Low Bone Mineral Density: A Feasibility Study

Freeman L, Handt ML, Ochoa SL
Lynn Freeman

2155 Validation of Patient Satisfaction Measures in a Physical Therapy Clinic With a Vulnerable Population

Milidonis MK, Keehan JG
Mary Milidonis

- 2156** **Effect of a Cross-Cultural Service-Learning Trip on the Clinical Cultural Competency of Physical Therapist Students**
Sanko JP, Leininger PM, Wagner BR, Ross MD
Michael Ross
- 2157** **Implementation of a Pediatric Rehabilitation Program for Children With Disabilities in the Ecuadorian Amazon**
Falcone NM, Cadena A
Nicole Falcone
- 2158** **Moderating Effects of Cognitive-Behavioral Variables on the Effectiveness of Two Different Long-Term Web-Based Weight Loss Interventions Among Women Living in Rural Underserved Areas**
Hageman PA, Kupzyk KA, Yoerger M, Pullen CH, Eisenhauer CM, Pozehl B
Patricia Hageman
- 2159** **Mobile Technology to Support Home Exercise for People With Arthritis: A Qualitative Study of Patient and Physical Therapist Perspectives**
Smith P, Liebman B
Paula Smith
- 2161** **Predictors of Discharge Settings Following Total Knee Arthroplasty in Medicare Patients**
Welsh R, Graham JE, Karmarkar AM, Leland NE, Baillargeon JG, Wild D, Ottenbacher KJ
Rodney Welsh
- 2162** **The Role of Social Media and Its Effect on Adherence in Physical Therapy Care: A Systematic Review**
Malta SL, Carpenter CM, Kenealy S, Reynolds J, Sotherden SR
Shauna Malta
- 2163** **Utilizing a Quality of Life Measure to Improve Patient Satisfaction in Inpatient Rehabilitation for Patients With Acquired Brain Injury**
Windler S, Rankel E, Bienstock JB

Stephanie Windler

- 2164 Planting Seeds of Diversity, Equity, and Inclusion Through Brain Games**
Klappa SG, DeLorm P, Alles Y, Blatt S, Sattgast J
Susan Klappa
- 2165 DPT Student Experiences With Error Reporting During Clinical Education**
Struessel T, Van Zytveld CR
Tamara Struessel
- 2166 Collaborating With Rural Communities to Facilitate Access to Health Promoting Activities**
Christenson ME, Bostwick K, Chavez-Pardini G, Molenaar C, Paasche M, Parker T, Welter A
Taylor Parker
- 2167 Implementation of an Evidence-Based Fall Reduction Program to Improve Functional Wellness of Older Adults in a Senior Living Community**
Harnish A, Dieter WB, Shubert T
Andrew Harnish

Neurology: Degenerative Disease SIG

- 2168 Benefits of Physical Activity in Improving Function in Persons With Parkinson Disease**
Andreasik AA, Williams AA, Colon-Semenza C, Deangelis TR, Hendron K, Ellis T
Alexis Williams
- 2169 Cerebrovascular Reserve Capacity Is Lower During Exercise in People With Elevated Beta-Amyloid**
Whitaker A, Kempf KS, Kirkendoll KT, Vidoni ED, Burns JM, Billinger S
Alicen Whitaker
- 2170 Endurance Exercise Improves Function in Individuals With Parkinson's Disease: A Meta-analysis**
Flach A, Jaegers L, Krieger M, Bixler EA, Kelly PV, Weiss E, Ahmad S
Alicia Flach

- 2171 Feasibility of Wearable Technology for Guided Dance in People With Parkinson's Disease: A Pilot Study**
DeBlois A, Yates-Horton E, Asher S, Clipston E, Kraut E, Columna L, Tunur T
Amy DeBlois
- 2172 LSVT-BIG Vs Non-amplitude Oriented Interventions: Impact on Motor Function in Individuals With Parkinson's Disease: A Systematic Review**
Black C, Fair J, Hopper K, Perron H, Coventry AW
Ann Coventry
- 2173 Cortical Thickness and Local Gyrfication Index Differences in De Novo Parkinson's Disease With and Without Mild Cognitive Impairments**
Tessiatore A, Nguyen H, Stefely K, Hufford AM, Manes J, David FJ, Liu K, Brink Saeed K, Corcos DM, Kurani A
Anna Tessiatore
- 2174 Investigating Vestibular Rehabilitation With a Person With Charcot Marie Tooth Disease and Its Effects on Fatigue**
Fangman A
Annie Fangman
- 2175 Role of Physical Therapy in Implementation of Baclofen Pump Trial and Placement Protocol**
Houwer BA, Oeffling A, Uhlrich K
Beth Houwer
- 2176 The Use of Forced Rate and One-Legged Cycling to Improve Walking Capacity in a Patient With Parkinson's Disease and Chronic Obstructive Pulmonary Disorder**
Toprani B, Eikenberry M
Bijal Toprani
- 2177 The Effectiveness of Transcranial Direct Stimulation on Gait in Persons With Parkinson's Disease: A Systematic Review**
Esterle B, Fluehr LE, Liberatore C, McEnroe M, Hakim RM
Brian Esterle

- 2178 A Systematic Review of the Effectiveness of Guided Motor Imagery in Managing Multiple Sclerosis Symptoms**
Matalon R, High C, Balasubramanian C, Vallabhajosula S
Carleigh High
- 2179 Comparison of Balance Performance on Force Platform Measures in Individuals With Parkinson Disease and Healthy Adults**
Harro CC, Hargis C, Dewitt A, Kelch A
Cathleen Harro
- 2180 A Comparison of Two FDA-Approved Validated Devices That Provide Multidimension Quantifiable Gait Parameters in People With Multiple Sclerosis (PWMS)**
Burke C, Gudesblatt M, Trebing S
Christina Burke
- 2181 A Physical Therapist's Role in a Huntington's Disease Comprehensive Care Clinic**
Ross C, Facer SL
Sondi Facer
- 2182 Aging With the Fragile X Mental Retardation1 Gene: A Life Course Perspective**
Lieb-Lundell C
Cornelia Lieb-Lundell
- 2183 Outpatient Physical Therapy in a Woman Who Is a Manifesting Carrier of Duchenne's Muscular Dystrophy Gene**
Lotan D
Dana Lotan
- 2184 Comparison of Patterns of Balance Loss Following Perturbations in Standing for People With Multiple Sclerosis Versus People With Parkinson's Disease**
Gadayan J, Hughes B, Jang C, Widener GL, Lazaro RT, Allen DD
Diane Allen

- 2185** **Gait, Balance, and Quality of Life in a Person With Parkinson's Disease Following Home Training for Larger Arm Swing: A Case Report**
Thompson ED, Reimann H, Fettrow T, Weiss S, Agada P, Wright W, Jeka J
Elizabeth Thompson
- 2186** **Intense Bout of Physical Therapy to Address Freezing of Gait and Improve Quality of Life for an Individual With Parkinson's Disease**
Ulanowski E, Danzl M, Blake M, Little JM
Elizabeth Ulanowski
- 2187** **Cognitive Load and Usage of Wearable Technology for Dance in Persons With Parkinson's Disease: A Pilot Study**
Yates Horton E, DeBlois A, Brodfuehrer L, Licata JA, Columna L, Tunur T
Elizabeth Yates Horton
- 2188** **Effect of Group Exercise on Mobility for Individuals With Parkinson Disease**
Leahy TE, Cleveland ED, Patterson L
Emily Cleveland
- 2189** **The Impact of Different Forms of Dance Therapy on Functional Mobility, Cognition and Quality of Life in Individuals With Parkinson's Disease**
Fritz H, Croley A, Mancuso MM, Lieberman A, Mucaro GM
Heather Fritz
- 2190** **Effect of Velocity Training on Gait Endurance in Persons With MS: Partial Results of an Ongoing Study**
Karpatkin H, Benson A, Gardner N, Ramos N, Xu A, Broker N
Herb Karpatkin
- 2191** **The Effect of Fatigue on Motor Performance in Persons With Parkinson's Disease: Partial Results of an Ongoing Study**
Karpatkin H, Schroeder D, Polster E, Gayeski E, Meredith L, Sheer P
Herb Karpatkin

- 2192 The Effects of Motor Imagery on Movement Dysfunction in Patients With Parkinson's Disease: A Systematic Literature Review**
Anderson MM, De Simone R, Etre N, Suffredini D, Vachon J, Yargeau M, Bianchi NA, Escorpizo R
Jacqueline Vachon
- 2193 Functional Outcomes After Participation in a Week-Long, Intensive Exercise Program Offered Annually to Persons With Parkinson Disease: A Case Series**
Readinger J, Von Nieda K, Eastlack M, Sawyer KL, Cirelli DM, Crone A, Hagar E, Kagan J, Kim E, McIntyre B, Sanelli B, Stack M
Janet Readinger
- 2194 Self-Efficacy Towards Exercise in People With Parkinson's Disease Who Participate in a Wellness Retreat**
Charpentier J, Lawler H, Ulanowski E, Danzl M
Jasmine Charpentier
- 2195 The Use of Heel Lifts for Individuals With Parkinson's Disease to Improve Postural Stability**
Hastings J, Brown C, McNabb MJ, Repasky C
Jennifer Hastings
- 2196 Balance-Based Torso Weighting for People With Degenerative Ataxia: Balance and Temporospacial Gait Measures**
Furze J, Pulscher JL, Threlkeld AJ
Jennifer Pulscher
- 2197 Speed-Focused, Intermittent Exercise Improved Function in a Person With Multiple Sclerosis and Limited Medical Intervention**
Canfield RE, Francois J, Freund J
Rae Canfield
- 2198 The Effects of Large Amplitude Movement Training in an Unweighted Harness System on Functional Outcome Measures and Fear of Falling in Individuals With Parkinson's Disease**
Mowder-Tinney J, Camilleri G, Horan J, King G, Lang B, Partridge B, Parton S, Pullano K, Newton A

JJ Mowder-Tinney

- 2199 Complexity and Fractal Dynamics of Gait in a 46-Year-Old Man With Chronic Inflammatory Demyelinating Polyneuropathy (CIDP): A Case Report**
Hollman JH, Beckman BA
John Hollman
- 2200 An Individualized Locomotor Training for Freezing of Gait in Parkinson's Disease Augmented by Transcranial Direct Current Stimulation: A Case Report**
Swarowsky A, Rice J, Aldraiwiesh S, Gomes-Osman J
Jordyn Rice
- 2201 Replicating Clinic Physical Therapy at Home: Using Sensor Technology in a Parkinson Disease Population**
Walker J, Coverdale A, McElroy C
Andrea Coverdale
- 2202 Implementation and Patient Satisfaction of a Multidisciplinary Parkinson's Disease Clinic**
Miesbauer K, Peter R, Lev G
Katherine Miesbauer
- 2203 Gait Speed Changes With Balance-Based Torso Weighting in Persons With Neurological Conditions**
Mitchell KD
Kathryn Mitchell
- 2204 A Case Study Demonstrating the Benefits of Physical Therapy Service Trips for an Individual With a Progressive Neuromuscular Disease Without Reliable Healthcare**
Baker K, Colella T, Nelson A, Feldman KW
Kelsey Baker
- 2205 Reliability, Validity, and Responsiveness of the Mini-Balance Evaluation Systems Test (Mini-BESTest) in Individuals With Multiple Sclerosis**

Potter K, Bowling R, Oppland B, Stone A, Wolf L, Wooldridge A
Kirsten Potter

2206 Impact of a Community-Based Rock Steady Boxing Program for People With Parkinson's Disease: A Pilot Study

Johnson KL
Kristin Johnson

2207 The Influence of Carbon Composite and Plastic Ankle-Foot Orthoses on Balance and Gait in Individuals With Multiple Sclerosis: A Pilot Study

Jackson K, Bigelow KE, Goubeaux H, Macy C, Trauner T, Hollis S
Kurt Jackson

2208 The Reliability of a Self-Report Questionnaire About Lifetime Physical Activity Levels in People With Parkinson's Disease

Johnson KN, Zorn J, Salgo D, Landers MR
Kyle Johnson

2209 Clinical Characteristics of Responders Versus Nonresponders to a Gaming Intervention in Individuals With Parkinson's Disease (PD)

Wessbecher L, Pradhan S
Laura Wessbecher

2210 The Effect of Music on Gait Pattern for Patients With Parkinson's Disease

Guzman JL, McEwen M, Cooper R
Madeline McEwen

2211 Training Reactive Postural Adjustments in Parkinson's Disease

Smith MB, Barnes C, Haener JM, Jurrens KL, Lew CW, Natsume S, Szczepanik N, Tamura SA
Marcia Smith

2212 Improved Mobility in a Patient With ALS Following a Strengthening and Conditioning Program: A Case Report

Caraher MJ, Vitolo C, Cahalin LP, Wong M
Matthew Caraher

- 2213 Making the “MOST” of a One-Day Wellness Retreat for Individuals With Parkinson’s Disease: A Qualitative Case Study**
Danzl M, Ulanowski E, Paydo CA, Jacquelyn B
Megan Danzl
- 2214 Association of Physical Activity With Psychosocial Variables and Non-motor Symptoms in Parkinson’s Disease: A Cross-Sectional Study**
Danzl M, Ulanowski E, Paydo CA, Loprinzi PD
Megan Danzl
- 2215 Intense Balance and Dual-Task Training in a Patient With Idiopathic Normal Pressure Hydrocephalus**
Eikenberry M
Megan Eikenberry
- 2216 The Effects of Maximal Strength Training on Mobility Deficits in Persons With Multiple Sclerosis: Partial Results of an Ongoing Study**
Zervas M, Wnukowski M, Kaems K, Cerrati A, Chan N, Shamsian M, Karpatkin H
Michael Zervas
- 2217 Assessing Postural Control in Parkinson’s Disease With Computerized Dynamic Posturography**
Rivera M, Gomez S, Yamigami T
Monica Rivera
- 2218 The Impact of Social Relatedness Within a Group Exercise Setting in Persons With Parkinson’s Disease**
Matthews ND, Lochala C, Thomas N, Marchbanks S, Lewthwaite R, Fisher BE
Ndidiama (Didi) Matthews
- 2219 The Impact of Cardiovascular Treadmill Training to Improve Neurogenic Hypotension in a Patient With Cerebellar Multiple Systems Atrophy: A Case Report**
Trivison N
Nicole Trivison

- 2220** **Backward Walking Measures Better Identify Future Fallers in Multiple Sclerosis Than Forward Walking**
Atalla M, Edwards E, Fritz NE
Nora Fritz
- 2221** **The Effects of Yoga Breathing and Postures on Non-motor Symptoms and Balance in Individuals With Parkinson's Disease: A Pilot Study**
Ghosh PK, Booher A, Kralemann M, Siesener E, Amling BN
Pradip Ghosh
- 2222** **Predicting Walking Activity in Parkinson's Disease**
Martin RA, Fulk C, Dibble L, Ellis T, Cavanaugh JT, Ford M, Foreman KB, Earhart GM, Fulk G
Rebecca Martin
- 2223** **Properties of TUG and TUG-Cognitive in a Population With Parkinson's Disease**
Greany JF, Phillips R
Rebekah Phillips
- 2224** **Feasibility and Benefits of an Adapted Pilates Program for Individuals With Parkinson's Disease**
Mclsaac TL, Klawonn A, Szczublewski S, Kane A, Leach J, Edwards C
Samantha Szczublewski
- 2225** **For Persons With Parkinson's Disease, Are Cueing Interventions Effective in Reducing Freezing of Gait?**
Isaacson S, Cosentino AL, Poltricitisky S, Byrne T, May T, Camelotto J, Cordovi M, Gilboa D, Fluet GG
Sara Isaacson
- 2226** **The Impact of Community-Based Group Exercise on Individuals With Parkinson Disease: An Observational Study**
Fishel S, Barron M, Bellanca S, Frizzell S, O'Brien N, Skowronski J, Standera N, Wright H
Sarah Fishel

- 2227 Cardiorespiratory Fitness Among Group Exercisers With and Without Parkinson Disease Who Exercise at Different Intensities**
Combs-Miller SA, Beekley M, Porch LR, Meardith W, Pigg ZJ, Sutter S
Stephanie Combs-Miller
- 2228 The Effects of a Rowing Machine Exercise Program on Aerobic Capacity, Gait Speed, and Posture in People Living With Parkinson's Disease**
O'Neal S, Eikenberry M
Suzanne O'Neal
- 2229 The Effects of Hip Flexion Orthotic Vs Dynamic Ankle-Foot Orthotic on Walking Ability in Patients With Multiple Sclerosis: A Case Series**
Lee TH, Pinner A
Tanya Lee
- 2230 Impact of Postural Control, Circuit, and Aquatic Physical Therapy in a Group Setting on Three Pediatric Patients With Familial Friedreich's Ataxia**
Kazemfar T, Studer-Byrnes R, Senesac CR
Tara Kazemfar
- 2231 The Figure-of-8 Walk Test: Early Indicator of Deficits in Motor Skill of Walking for Older Adults With Parkinson's Disease**
Woods T, Lowry KA, VanSwearingen J
Taylor Woods
- 2232 Dual-Task Walking Impairments in Older Adults With Mild Cognitive Impairment**
Kelly VE, McCurry SM, Logsdon RG, Teri L, McGough EL
Valerie Kelly*
- 2233 Physical Therapist-Led Yoga for Individuals With Huntington's Disease: A Qualitative Case Study**
Ulanowski E, Danzl M, Schwartz V, Reed C
Victoria Schwartz

- 2234 The Effect of Augmented Reality Visual Cues on Temporal-Distance Gait Parameters in Individuals With Parkinson's Disease: A Systematic Review**

Connell W, Crowley A, Fitzgerald C, Marri S, Hakim RM

William Connell

- 2235 The Effects of a Wellness Exercise Class on Perceived Walking Ability, Fatigue, Quality of Life, and Sustainability of Exercising Independently in Persons With Multiple Sclerosis**

Langer ZD, Karpatkin H

Zabrina Langer

Neurology: Vestibular SIG

- 2236 Persistent Positional Nystagmus in a Patient With a Central Vestibulopathy Acutely Mimicking Meniere's Disease and Benign Paroxysmal Positional Vertigo: A Case Report**

Wagner AR, Henderson C

Andrew Wagner

- 2237 The Integration of Virtual Reality Goggles and Free Roller Coaster Phone App in the Management of a Pregnant Woman With Vestibular Neuritis: A Case Report**

Bass B, Ries JD

Bianca Bass

- 2238 Effectiveness of Vestibular Rehabilitation on Concussion-Induced Vertigo: A Systematic Review**

Kinne B, Bott J, Cron N, Iaquaniello R

Bonni Kinne

- 2239 The Use of Vestibular Rehabilitation for Individuals With Migraines: A Systematic Review**

Kinne B, Baker BJ, Chesser B

Bonni Kinne

- 2240 Effect of a Novel Palatal Alternative Sensory Feedback Device on Postural Stability and Dynamic Balance: A Case Series**

Abbott C, Erhardt BF, Rivera AL

Carmen Abbott

- 2241 Treatment of Ramsay Hunt Syndrome With Vestibular Rehabilitation: A Case Report**
Mounteer C
Carolyn Mounteer
- 2242 The Necessity for Post-Maneuver Restrictions in the Treatment of Benign Paroxysmal Positional Vertigo: An Updated Systematic Review and Meta-analysis**
Cromwell CM, Tyler J, Nobbs R, Hockaday A, Donnelly S, Clendaniel R
Christina Cromwell
- 2243 The Effect of Balance-Based Torso Weighting and Balancewear Therapy on Gait, Balance, and Participation in Individuals With Vestibular Dysfunction: A Case Series**
Durborow C
Curry Durborow
- 2244 Effects of Vestibular Training on a Patient With Chronic Post-concussion Syndrome Following a Customized Vestibular Rehabilitation Program: A Case Report**
Garay E
Eileen Garay
- 2245 A Retrospective Exploratory Study on Visual Convergence and Divergence Screening Tests in the People With Vestibulopathy**
Dannenbaum E, Chilingaryan G, LaMontagne A
Elizabeth Dannenbaum
- 2246 A Tool to Quantify the Impact of Oscillopsia on Functional Mobility**
Anson ER, Kiemel T, Jeka J, Carey J
Eric Anson*
- 2247 Factors Associated With Functional Outcomes Following Acoustic Neuroma Resection**
Finnen E, Adams JT, Newkirk M, Hawthorne C

Erin Finnen

**2248 Screening for Temporal Mandibular Joint Dysfunction in a Patient With
Dizziness: A Case Report**

Ademski GK, Wood JM

Grace Ademski

**2249 The Role of Vestibular Physical Therapy in the Rehabilitation of Patients
With Wallenberg's Syndrome: A Case Series**

Root MK, Krigsman H

Hallie Krigsman

2250 Physical Therapy for Lateropulsion Due to Wallenberg Syndrome

Matejovsky I

Isabelle Matejovsky

**2251 Intractable Presentation and Treatment of BPPV in a Patient With Spinal
Scoliosis**

Kedzierska I

Iwona Kedzierska

**2252 Visual World Tilt, Vertigo, and Imbalance in a Young Woman With
Suspected Unilateral Utricular Hypofunction**

Brodovsky JR

Janine Brodovsky

**2253 Differential Diagnosis of Vertigo Following Superior Canal Dehiscence
Repair**

Fay JL, Root MK

Jennifer Fay

**2254 Balance Rehabilitation and Assessment Using Virtual Environments for a
Patient With Bilateral Vestibular Dysfunction**

Lubetzky AV, Kelly JL, Fu G, Perlin K

Jennifer Kelly

- 2255 Subclinical Vestibular Dysfunction in People With Unilateral Lower Limb Amputation**
Lucarevic JJ, Gailey R, Symsack A, Clemens SM, Moore JG, Gaunaurd I, Agrawal V, Bennett C, Kim KJ, Schubert MC
Jennifer Lucarevic
- 2256 Vertical and Torsional Alignment Nulling: A Rapid Quantification of Binocular Misalignment Without Recording Eye Movements**
Millar J, Gimmon Y, Serrador JM, Schubert MC
Jennifer Millar
- 2257 A Comparison of Head Velocity Between the First Movement of the Epley Maneuver and the Long Arc Movement of the Semont Maneuver**
Nelson J, Buske BN, Gallagher E, Johnson M, Strafelda AJ, Longacre B
Jon Nelson
- 2258 Internal Validation of the Vestibular Activities Avoidance Instrument (VAAI)**
Alshebber K, Sparto P, Marchetti GF, Staab JP, Furman JM, Whitney SL
Kefah Alshebber
- 2259 The Use of Habituation Exercises in a Visually Impaired Patient Receiving Vestibular Rehabilitation: A Case Study**
Cialino L
Laura Cialino
- 2260 The Impact of Type 2 Diabetes on Mobility Deficits Measured by the Functional Gait Assessment in Individuals With Benign Paroxysmal Positional Vertigo**
D'Silva LJ, Kluding P
Linda D'Silva
- 2261 Suggested Guidelines for Backwards Walking Speed for the Functional Gait Assessment**
Heusel-Gillig L, Nogi AL, Hall CD
Lisa Heusel-Gillig

- 2262 Successful Treatment of Anterior Canal Cupulolithiasis With Liberatory Maneuver**
Catterall NC
Natalie Catterall
- 2263 The Gaze Stabilization Test Following Concussion**
Dunlap P, Mucha A, Smithnosky D, Whitney SL, Furman JM, Collins MW, Kontos AP, Sparto P
Pamela Dunlap
- 2264 The Aging Effect on Brain Hemodynamic Changes During Different Walking Tasks—A Functional Near-Infrared Spectrometry Study**
Hudson R, Lin C, Blanton CJ, Huppert T, Sparto PJ
Rachel Hudson
- 2265 Telerehabilitation for Management of Post-concussive Symptomology: A Case Report**
Bliss R, Carr W, Holwick H, Wilson J, Semaan JL, Pemble EK, Baker K
Rebecca Bliss
- 2266 Diagnosing Vestibular Dysfunction in a Persons With Charcot-Marie-Tooth: A Case Presentation**
Brindle S, Brodovsky JR, Grant-Case CR, Miczak K
Sarah Brindle
- 2267 Effect of Gaze Stability Exercises on Chronic Motion Sensitivity: A Randomized Controlled Trial**
Gaikwad SB, Johnson E, Nelson TC, Ambode Oi, Albalwi AA, Alharbi AA, Daher NS
Shilpa Gaikwad
- 2268 Virtual Reality Treatment for Agoraphobia in Vestibular Rehabilitation**
Hunt S
Sierra Hunt

Orthopaedics: Hip/Knee

2269 Patellofemoral Joint Loads Vary With Running Speed: Application to Individuals After ACL Reconstruction

Hollingsworth CN, Dixon M, Willy RW, Willson JD

Chelsea Hollingsworth

Orthopaedics: Spine

2270 Diagnosis and Treatment of a Patient With Chronic Posterior Chest Wall Pain

Smith CR, McDonnell MK

Cheryl Smith

Orthopaedics: Foot/Ankle

2271 Wearable Technology May Assist in Retraining Foot Strike Patterns in Previously Injured Runners

Watson D, Miller EM, Szymanek E, Freisinger G, Goss DL

Daniel Watson

Orthopaedics: Spine

2272 Effect of Progressive Resistance Exercise on Activity and Participation in Individuals With Chronic Low Back Pain: A Systematic Review

Torres E, Kulkarni S, Parekh R, Lopes A

Edgar Torres

Orthopaedics: Other

2273 Comparing High-Velocity Low-Amplitude Distraction Manipulation Forces Between Physical Therapy Students and Expert Clinicians

Folkins E, Andronico J, Dilullo C, Krieger N, Petroski N, Rogers, Jr J

Eric Folkins

2274 Efficacy of Instrument-Assisted Soft Tissue Mobilization for the Treatment of Musculotendinous Injuries: A Systematic Review

Thompson JA, Crowder L, Le D, Roethele AJ

Jeffrey Thompson

Orthopaedics: Pain Management

2275 The Role of Therapeutic Alliance in Physical Therapy for Chronic Musculoskeletal Pain: A Systematic Review

Kinney M, Seider J, Beaty A, Coughlin K, Dyal M, Clewley D

Meredith Kinney

Orthopaedics: Foot/Ankle

2276 Use of Y-Balance Test for Persons With Chronic Ankle Instability

Vallabhajosula S, Freund J, Fadool M, Manning SM, Groulx D, Wikstrom E
Michelle Fadool

Orthopaedics: Pain Management

2277 The Effectiveness of Virtual Reality as an Intervention to Decrease Chronic Low Back Pain in Adults as Compared to Standard Therapeutic Intervention: A Systematic Review

Leininger PM, Kuptsov AE, McCarty P, Tapia E, Wisowaty D
Peter Leininger

Orthopaedics: Hip/Knee

2278 Differences in Knee and Hip Adduction and Hip Muscle Activation in Runners With and Without Iliotibial Band Syndrome

Baker RL, Souza RB, Powers C, Rauh MJ, Fredericson M, Rosenthal MD
Robert Baker

Orthopaedics: Pain Management

2279 Relationship Between Delayed Pain Flares, Psychogenic Stress, and Free Thyroxine in Patients With Phantom Limb Pain

Allen RJ, Ip AY, Fazzini EM
Roger Allen

Orthopaedics: Other

2280 Do Individuals With Vision Impairments Suffer Physical Injury While Using Guide Dogs?

Kalish SS, Totherow A, Welch C, Jenkins K, Powers R, Conner-Kerr T
Sue Ann Kalish

Orthopaedics: Residency Poster Case Report

2281 Identification of Intradural Extramedullary Tumor in a Patient With Low Back Pain and Urinary Incontinence

George A, Lederman R, Malloy M, Peyton C
Alyssa George

- 2282 Identification of Peripheral Arterial Disease (PAD) in a Patient Referred for Lumbar Radiculopathy in an Outpatient Orthopedic Clinic**
Schiller G, Christie R, Camarinos J, Marinko LN
Gregory Schiller
- 2283 Outcomes in Patients With Shoulder Pain With Comorbid Diabetes Mellitus Type II: A Case Series**
Moor H, Walston ZE, Yake DM
Heather Moor
- 2284 Thoracic Non-thrust Mobilization/Manipulation to Manage a Patient With Scapular Pain Following a Vertebral Artery Dissection: A Case Report**
Lee H, Hensley CP
Hyun Su Lee
- 2285 Physical Therapist (PT) Expertise in Musculoskeletal Screening in the Multidisciplinary Management of a 36-Year-Old Female With an Evolving Case of Low Back Pain (LBP)**
Walton J, Magel JS, Cohee K
Jenna Walton
- 2286 Low Back Pain in the Post-radiation Patient: A Case Study on Proctitis**
Harrison J, Hensley CP
Jess Harrison
- 2287 Hip Strengthening and Balance Training for Improved Gait and Balance Outcomes: A Case Series on Specific Exercises for Gluteal Strengthening**
Scott M, Yake DM, Walston ZE
Margaret Scott
- 2288 Impairment-Based Intervention Directed to the Lumbar Spine for Older Adults Presenting With Upper Quarter Primary Complaints**
Gray M, Walston ZE, Yake DM
Michael Gray
- 2289 Lumbar Radiculopathy Treatment Based on Irritability: A Case Series**
Blank ZA, Yake DM, Walston ZE

Zachary Blank

2290 Cardiovascular Screening and Medical Management of a Patient Referred to Physical Therapy

Rethorn ZD

Zachary Rethorn

Orthopaedics: Imaging

2291 Clinical Decision Making With an Undiagnosed Post-traumatic Fracture of Pubic Bone

Hull A, Perez RL, Minton Z, Cheung A

Andrea Hull

2292 The Use of Musculoskeletal Ultrasound (US) in Thoracic Outlet Syndrome (TOS) as It Relates to Muscular Atrophy and Vascular Impairments: A Case Report

Smith BA, Milian EK, Boady J, Cottle A, Fantin B, Hiestand J, Shannon HE, Milian A

Bryon Smith

2293 A Comparison of Abdominal Muscle Thickness in Unloaded and Loaded Positions in Normal Adults

Abercrombie E, Schleien C, Tinter H, Proctor R, Visco C, Chiarello CM

Cynthia Chiarello

2294 Real-Time Ultrasound Imaging Assessment of the Piriformis During Varying Degrees of Hip Flexion

Gill CH, Holland L, Gertler D, Gast B

Cynthia Gill

2295 Is Calcaneal Quantitative Ultrasound a Valid Surrogate Measure for Hip Dual-Energy X-Ray Absorptiometry in Young Adults?

Gutekunst D, Bennett JE

David Gutekunst

2296 Ultrasound Scanning for Early Detection of Movement, Abnormal Movement, and Fibrosis in Patients With Facial Palsy

Barth JS, Stezar GL, Chua C
Gincy Stezar

2297 Feasibility of Quantitative T2* MRI to Monitor Accelerated Disc Degeneration in Individuals With Scoliosis Following Corrective Fusion Surgery

Foltz MH, O'Leary RM, Rudolph NL, Reader D, Schlitter KA, Ellingson AM
Krista Schlitter

2298 The Relationships Between Imaging Findings of Fatty Infiltration and/or Atrophy of the Lumbar Multifidus Muscles With Symptoms of Back Pain: A Systematic Review

Everatt KK, Goodwin LA, Beattie PF, Jordon M
Max Jordon

Orthopaedics: Performing Arts

2299 Musician Injury Prevention Screenings in a University Onsite Physical Therapy Clinic

Wilson A, Boyles R, Ward KC
Ann Wilson

2300 Prediction of Injury Among Elite Dancers: Four Years of Prospective Surveillance

Dilgen FE, Pappas E, Sandow E, Edery-Altas S, Liederbach M
Faye Dilgen

2301 Asymmetrical Movement Patterns in Female Collegiate Dancers Identified by the Functional Movement Screen (FMS)

Kanter M, Schwamb K, Smith TR, Brown KM, Brosky JA
Joseph Brosky

2302 A Rubric for Evaluating Adolescent Dancer Screens

Sun KL, Schaeffer M, Abbruzzese LD
Kathleen Sun

2303 Survey of Ballet Dance Instructors and Female Dancers About Determinants of Pointe Readiness and Utilization of Physical Therapists During Screening

Veirs KP, Dionne C, Baldwin J

Kimberly Veirs

2304 Movement Diagnosis and Management of a Professional Clarinet Player With Shoulder Multidirectional Instability: A Case Report

Morotani M

Maiko Morotani

2305 A Movement System Approach for Clinical Practice

Larkin M, Dalva JS, Renha R, Dilgen FE, Liederbach M

Marni Larkin

2306 Reliability of the Dyna-Rail: A Novel Handheld Dynamometer Stabilizing Device

Strzelinski M

Melissa Strzelinski

2307 Manual Therapy Interventions in a Complex Case of Upper Quarter Symptoms in a Professional Violinist

Howard PD

Paul Howard

2308 Components of Adolescent Dance Screens: What Should We Include?

Bronner S

Shaw Bronner

2309 Competitive Collegiate Dance Team Injuries: A Prospective Study

Watson T, Graning J

Todd Watson

Research

2310 Changes in Self-Reported Concussion History After a Novel Concussion History Questionnaire in Collegiate Recreational Athletes

Copp A, Warren M, Liningger M

Adam Copp

- 2311 Kinematic Analysis of a Game-Based Telerehabilitation System for Post-Stroke Upper Extremity Recovery**
McKenzie A, Razeghian J, Lopez J, See JD, Le V, Cramer SC, Beuttler R, Grant-Beuttler M
Alison McKenzie*
- 2312 Muscle Sequencing During Standing Flexion Differs Between Males and Females Independent of Low Back Pain and Standing Tolerance**
Renslo AL, Baker L, Longacre CR, Passarelli C, Riggs D, Tollis RG, Viggiani D, Davidson B, Callaghan JP, Nelson-Wong E
Amy Renslo
- 2313 Long-term Follow-Up Effects of a Multimodal Gait Training Program in an Individual With Chronic Stroke**
Boddy A, Perry LA, Balasubramanian C, Mengelkoch LJ
Anne Boddy
- 2314 Comparison of Supervised Versus Unsupervised Rehabilitation Following Total Knee Arthroplasty in Older Adults: A Systematic Review**
Elazzazi A, Alvear K, Saunders B, Nigolian JW, Johnson A
Ashraf Elazzazi
- 2315 Volitional Hamstring Force Production During Lower Extremity Closed Kinetic Chain Exercises in Supine Position: A Randomized Controlled Trial**
Paul S, Carpenter K, Komet I, Ozcan Edeer A
Ayse Ozcan Edeer
- 2316 Kinetic Feedback Can Impede the Ability to Reduce Impact Force During Landing**
Sidaway B
Ben Sidaway
- 2317 Botulinum Toxin Increases Passive Stiffness of the Extrinsic Finger Muscles in Chronic Hemiparetic Stroke Individuals**
Binder-Markey B, Murray W, Dewald JP

Benjamin Binder-Markey*

2318 Active Ankle Position Sense and Single-Leg Balance in Runners Versus Non-runners

Huynh B, Tacker R, Hung Y

Brian Huynh

2319 Telerehabilitation Compared to Conventional Physical Therapy to Improve Physical Performance in Community-Dwelling Adults: A Systematic Review

Lavado BC, Ortlieb MK, Rohleder MR, Wagner BR, Hakim RM

Brian Lavado

2320 An Innovative Approach to Measuring the Trajectory of Lower Extremity Swelling Following Total Knee Arthroplasty

Loyd B, Gerron K, Ruse R, Iannitto J, Pineda M, Hogan C, Dayton MR, Stevens-Lapsley JE

Brian Loyd*

2321 Validation of the Lower Extremity Functional Scale in Patients With Nonsurgical Knee Pain

O'Brien C, Beal A

Caleigh O'Brien

2322 Concussion Recognition, Awareness, and Education in Youths: Athlete Versus Non-Athlete: A New Survey Feasibility Study

Minahan C, Schweinsburg C, Race J, Hammond M, Friele A

Carrie Minahan

2323 In Recreational Runners, Is Step Rate Manipulation an Effective Intervention for Modifying Stance Phase Hip Angles and Moments?

Agoglia A, DeFrancesco J, Lapham K, Riccio CL, Schenker A, Ventura T, Vinciguerra R, Williams BJ, Brown A

Cassandra Riccio

2324 Lower Extremity Kinematics During Gait in Healthy Persons With and Without a Robotic Exoskeleton

Swank C, Wang-Price S, Gao F, Almutairi S
Chad Swank

2325 Sedentary Behavior Is Related to Reduced Mechanical Pain Tolerance in Healthy Pain-Free Adults

Maluf KS, Crossen C, Herman J, Krouse M, Larios V, Miller E
Christina Crossen

2326 Walking-Induced Plantar Temperature Increase in Non-diabetic Healthy Subjects

Adams LS, Ersen A, Flyzik M, Holmes C, Walters B, Engle J, Gautam D, Rodriguez M, Thomas R, Yavuz M
Clayton Holmes

2327 The Reliability of Musculoskeletal Ultrasound Measurements Recorded by Certified and Uncertified Clinicians

Bailey C, Holshouser C, Willaford N, Jagger KL, Harper B, Aron A
Cody Bailey

2328 Characteristics of Locomotion During Dual-Tasks in Typically Developing Children

Chau C, Brick L, Crumlish J, Delaney C, Sancilio D
Connie Chau

2329 Males Utilize a Trunk Stiffening Strategy for Returning to Stand From Flexion Compared to Females Regardless of Low Back Pain Status and Standing Tolerance

Longacre CR, Baker L, Passarelli C, Renslo AL, Riggs D, Tollis RG, Viggiani D, Davidson B, Callaghan JP, Nelson-Wong E
Connor Longacre

2330 The Experience of Evidence-Based Practice: The Clinician's Perspective

Fay D, Tovin MM, Hettrick H, Fetters L
Deanne Fay

2331 A Comparison of Four Agility Tests in Young Adults

O'Connell DG, O'Connell J, Rutland MD

Dennis O'Connell

2332 Quantifying Gait Differences in Middle-Aged Adults in the 4-Item DGI Test

Stiskal DM, Duff JM, Bollati M, Castro MP, Connors T, Markwell K

Doreen Stiskal

2333 Predicting Fall Status in Older Adults Using Health-Related Quality of Life

Cleary KK, Skornyakov E

Elena Skornyakov

2334 The Effect of Lower Extremity Muscle Fatigue on Standing Balance in Healthy Adults: A Pilot Study

Fineza E, Palmadessa M, Ozcan Edeer A

Elise Fineza

2335 Static Postural Sway and Center of Pressure Measures: Concurrent Validity in Older Adults With Cognitive Impairment

McGough EL, Hsu L, Teri L

Ellen McGough

2336 Systematic Collection and Objective Progressive Exercise

Bowden MG, Monsch ED, Kraft SV, Hammond S

Eric Monsch

2337 The Effect of Lumbar Mobilization on Back Muscles in People With Low Back Pain

Mehyar F, Santos MJ, Wilson S, Staggs VS, Sharma NK

Fahed Mehyar

2338 Use of a Novel Community-Based Participatory Research Approach to Translate Evidence-Based Medical Guidelines Into Culturally Meaningful Messaging for Clients

Magnusson D, Sweeney FC

Frank Sweeney

2339 Avatar Perspective Promotes Limb Excursions (APPLE)

Hausfeld GC, Magary J, Leitkam ST, Applegate ME, Thomas JS
Gabrielle Hausfeld

- 2340 Comparison of Fallers and Non-fallers in Relation to Cervical Proprioception, Cervical Range of Motion, and Balance: Cross-Sectional Study**
Piguing G, Templeton J, Moya A, Ozcan Edeer A
Giovanni Piguing
- 2341 Outpatient Physical Therapy in the Emergency Department: A Descriptive and Prospective Analysis**
Mesa G, Wilson MF, Swoboda M
Greg Mesa
- 2342 Effects of Body Position on Grip Strength in Healthy Young Individuals**
Singh G, Csontos C, Costantino D
Gurpreet Singh
- 2343 Dose-Response of Neuromuscular Electrical Stimulation on Muscle Function in Patients With Rheumatoid Arthritis**
Almeida G, Khoja S, Piva SR
Gustavo Almeida
- 2344 Active Video Gaming for People With Type 2 Diabetes and Prediabetes—A Pilot Study**
Huang H, Gathright B, Holik R, Iverson H, Saville E, Curtis DA
Han-Hung Huang
- 2345 Active Yet Sedentary: The Association of Moderate to Vigorous Physical Activity and Sedentary Behavior With Incident Functional Limitation in Knee Osteoarthritis**
Master H, Thoma LM, Christiansen MB, Mathews DR, White D
Hiral Master
- 2346 Walking-Related Motor Fatigue in Multiple Sclerosis: Role of Central Mechanisms**
Arpan I, Miranda-Dominguez O, Smith S, Fair D, Horak FB

Ishu Arpan

2347 Interprofessional Total Hip Arthroplasty Simulation

Dulski J, Marshall B, Carter C, Cunningham S

Jacob Dulski

2348 Health Literacy and Activation to Manage Health: Initial Findings From an Inpatient Rehabilitation Sample

Gillespie JL

Jaime Gillespie

2349 The Effects of Practice on Performance of Drop Landing in Healthy Young Adults

Hackney J, Matzke R, Story T, Tentler A

James Hackney

2350 Vestibulo-ocular Reflex Function During Head Movement in Three Directions

Sansom J, Lomond KV, Zilch A

Jennifer Sansom

2351 Changes in Postural Strategies in Healthy Older Adults During Mediolateral Perturbations

Armour Smith J, Darmon YP, Fisher BE

Jo Armour Smith

2352 Effects of Walkbot Gait Training on Kinematics, Kinetics, and Clinical Gait Function in Paraplegia and Quadriplegia

Hwang J, Park J, Cha Y, Shin Y, You JH

Jongseok Hwang

2353 Establishing Normative Gait Spatiotemporal Values and Kinematic Curves in All Planes for a New Gait Lab

Barry JG, Kaltwasser N, Dukes KR, Hargis V, Huebner B, Schmittzehe A, Ross SA

Joni Barry

- 2354** **Impaired Vestibular Adaptive Response and Symptoms of Vertigo in Veterans With Posttraumatic Stress Disorder**
Haber Y, Serrador JM
Jorge Serrador
- 2355** **Stiff-Legged Gait Patterns Predict the Need for Future Contralateral Total Knee Arthroplasty**
Zeni J, Stevens-Lapsley JE, Bade M, Aljehani MS, Cheuy V, Snyder-Mackler L
Joseph Zeni
- 2356** **The Trajectory of Patient Mobility Across Acute Care and Skilled Nursing Facility Stays Is a Marker of Discharge Disposition**
Johnson JK, Marcus RL
Joshua Johnson*
- 2357** **Reliability and Validity of a Low-Profile Mobile Sensor System for Ecological Monitoring of Lumbar Spine Posture and Movement**
Gross K, Schneider KO, Hernandez A, Paladugu P, Sathyamoorthy K, Moon KS, Ozturk Y, Gombatto S
Karlie Gross
- 2358** **Can Heart Rate Be Used as a Measure of Treatment Fidelity**
Mangione KK, Harris S, Macropol K, Jia Y, Wolff EF, Tevald MA, Craik RL
Kathleen Mangione*
- 2359** **The Sitting Balance Scale: A Predictor of Gait Speed and Falls in Older Individuals**
Sanstrom K, Heitzman J, Soto AL
KC Sanstrom
- 2360** **Normal Joint Kinematics in Healthy Adults During Sit to Stand: A Systematic Review and Meta-analysis**
Thomasson K, Babino D, Kogler G
Kelsey Thomasson
- 2361** **A Systematic Review of SPHM Programs to Prevent Musculoskeletal Injuries in OTs, PTs, and Assistants**

Harwood KJ, Scalzitti D, Darragh A, Rockefeller K, Campo M
Kenneth Harwood*

2362 Exercise Perception and Behaviors in Individuals Living With Primary Immunodeficiency Disease

Sowers K, Litwin B, Lee AC, Galantino MA
Kerri Sowers

2363 Measuring Left/Right Judgment Task With a Card System and Recognize AppTM: A Multisite Test-Retest Reliability Study

Zimney K, Wassinger CA, Goranson J, Kingsbury T, Kuhn T, Morgan S
Kory Zimney

2365 The Effect of Time on Balance and Walking Measures in Adults With Acquired Brain Injury Participating in Adapted Yoga

Staats E, Thompson SL, Schaadt C, O’Kane JR, Hanna C, Schmid AA, Abdeldaiem A, Miller KK
Kristine Miller

2366 Validation of Special Olympics Balance Assessment

Collins K, Decker E, Esposito P
Kyla Collins

2367 Patient-Reported Functional Outcomes and Performance Measures in Adults With Symptomatic Knee Osteoarthritis: Development of a Composite Score

Iversen M, Ciano L, Daigneault C, Shea Regan E, Simoneau M, Allen KD
Laura Ciano

2368 Waist-to-Height Ratio and Muscular Fitness in Children and Adolescents

Kabiri LS, Brewer W, Ortiz A, Mitchell K
Laura Kabiri

2369 Methods to Assess Injury Risk in Community Sport: A Systematic Review

Patterson S, Geer LL, Warren M, Lininger M
Lauren Geer

- 2370 Atrophy and Voluntary Activation of Paretic Elbow Muscles in Individuals With Chronic Hemiparetic Stroke**
Garmirian L, McPherson LM, Acosta A, Dewald JP
Lindsay Garmirian
- 2371 Clinical Practice Guideline Appraisal Team Training Process and Outcomes**
Brown LE, Johnston TE, Denzer-Weiler C, Keller SA, Kaplan SL
Lisa Brown
- 2372 Short-term Cryotherapy and Placebo Therapy Improves Pain, Function, and Quality of Life in Individuals With Knee Osteoarthritis—A Randomized Controlled Trial**
Dantas LO, Carreira Breda C, Serrão PR, Jorge AE, Sendín FA, Cunha JE, Barbosa GM, Salvini TF
Tania Salvini
- 2373 Effects of Upper Extremity Weight-Bearing on Lower Extremity Neuromotor Excitability**
Darms MW, Bowden MG, Eddy JS, Cence B, Wonsetler EC
Madisson Darms
- 2374 Rhythmic Auditory Cueing Impacts Temporal and Not Spatial Gait Variability at Slow Walking Speeds in Healthy Adults**
Almarwani M, Brach J
Maha Almarwani
- 2375 Effect of Manual Therapy and Therapeutic Exercise on Functional Mobility and Gait in an Older Woman With Hyperkyphosis: A Case Report**
Ko M, Hughes L, Laprea A, Welsh R, Jang H, Burnett R, Khan MI
Mansoo Ko
- 2376 Energy Drinks Can Modify the CNS by Increasing Postural Sway and Center of Pressure**
Rosario MG
Martin Rosario

- 2377 Relationships Between Functional Capacity, Walking Behavior, and Disability After Dysvascular Amputation**
Miller MJ, Magnusson D, Froetscher L, Lev G, Fields T, Cook P, Stevens-Lapsley JE, Christiansen CL
Matthew Miller*
- 2378 Comparison of Two Methods to Measure Lower Extremity Muscle Power**
Pontiff M, Williams FA, Bui A, Wiegmann J, Moreau NG
Mattie Pontiff
- 2379 A Descriptive Study of the Effect of Payer Source on Multiple Longitudinal Outcome Measures Within the Traumatic Brain Injury Model Systems National Database Using Individual Growth Curve Modeling**
Hofmann MC
Melissa Hofmann
- 2380 Reliability, Validity, and Agreement of Spatiotemporal Gait Instrumentation**
Karleskint M, Dzurino D, Tucker J, Pabian P, Dawson N
Melissa Karleskint
- 2381 The Impact of Physical Activity on Attention Allocation in Normal and Narrow-Based Treadmill Walking**
Liu M, Siu K
Meng Liu
- 2382 Differential Diagnosis of Dizziness in a 67-Year-Old Female Hiker Presenting to Outpatient Physical Therapy: A Case Report**
Parsons J, Kinney A, Bade M
Michael Bade*
- 2383 Visceral Fat and Neuropathic Pain in People With Diabetic Peripheral Neuropathy**
Alshehri M, Alenazi A, Alsouhibani A, Obaidat SM, Jeffrey HC, Alothman S, Kluding P
Mohammed Alshehri

- 2384 The Non-operated Limb May Not Be a Valid Control Limb for Biomechanics After Unilateral Total Knee Arthroplasty**
Aljehani MS, Marmon AR, Madara KC, Stevens-Lapsley JE, Zeni J
Moiyad Aljehani
- 2385 Quantifying Achilles Tendon Insertional Area Dimensions Using US Imaging—A Validity and Reliability Study**
Alghamdi NH, Aitha B, Killian M, Silbernagel KG
Nabeel Alghamdi
- 2386 A Comparison of Lower Trapezius Activation During Two Test Positions: Examination Using In-Vivo Ultrasound Imaging**
Talbott N, Witt D, Nemann K
Nancy Talbott
- 2387 Forces During Two Provocation Tests of the Sacroiliac Joint: Intratester and Intertester Variability**
Witt D, Mulligan E, Frondorf A, Wilson R, Talbott N
Nancy Talbott
- 2388 Physical Activity: Levels, Knowledge, and Attitudes of Physical Therapy Students in the United States**
Pathare N, Conroy J, Gillard A, Hansen M
Neeti Pathare
- 2389 Feasibility of Injury Reporting Via SMS in Community Sport Settings: A Prospective Cohort Study**
Chimera NJ, Lininger M, Hudson B, Kendall C, Plucknette L, Szalkowski T, Warren M
Nicole Chimera
- 2390 What Is the Effect of Kinesiotape on Shoulder Complex Kinematics in Healthy Younger Adults?**
Rundquist PJ, Cooper CT, Mattson T, Choudek A, Sarkar S
Peter Rundquist
- 2391 Balance in Individuals With Down Syndrome and Intellectual Disabilities**

Bennett A, Pellett E, Kugler K, Decker E, Esposito P
Phil Esposito

2392 Knee Extensor Voluntary Activation and Strength Following Lumbopelvic Manipulation and Exercises

Frank R, Chong B, Hodgens M, Morelli KM, Garcia J, Tsai L
Rachael Frank

2393 The Relationship of Ankle Range of Motion and Falls in Community-Dwelling Older Adults

Garcia R, Azar A, Benjamin P, Evangelista C, Fried T, Rupp Y
Ralph Garcia

2394 Activity Recognition for Persons With Stroke Using Mobile Phone Technology

Cunkle R, Celello M, Den Boer K, Dorn A, Gilbert C
Renee Cunkle

2395 The Effects of Fatigue Upon Anteroposterior Scapular Control

Dale RB, Day JM, Blake A, Dowling J, Wyatt P, Papich H
Robert Dale

2396 Locomotor Function Improvements Occur With Response to Non-pharmacological Treatments for Post-stroke Depression

Ross R, VanDerwerker CJ, Stimpson K, Newton JH, George M, Gregory C
Ryan Ross

2397 Changes in Psychological Factors Are Associated With Changes in Functional Outcomes at One and Two Years After ACL Reconstruction

Zarzycki R, Logerstedt D, Snyder-Mackler L
Ryan Zarzycki

2398 How Muscle Mechanics Change With Age—Muscle Material Properties

Lee S, Xie A, Terman A, Santana RV, Jakubowski KL
Sabrina SM Lee

2400 Virtual Reality as a Learning Tool for PNF Patterns in Rehabilitation

Taylor S, Shafer C, Brown KM, Gunderson S, Mohapatra S
Sambit Mohapatra

2401 Increased Cardiovascular Response to a 6-Minute Walk Test in People With Type 2 Diabetes

D'Astice S, Senefeld J, Harmer AR, Hunter SK
Sarah D'Astice

2402 The Effect of Kinesiotape on Static Foot Posture and Plantar Pressure in Individuals With Pronated Feet: A Pilot Study

Holmgren SK, Dorri AM, Young CM, Jain TK, Cornwall MW
Sarah Holmgren

2403 Lower Extremity Muscle Activity During Gait With and Without a Robotic Exoskeleton in Healthy Adults

Swank C, Wang-Price S, Gao F, Almutairi S, Morar R, Signorelli A, Thakkar B
Sattam Almutairi

2404 Performance of the Functional Comorbidity Index in Prognostic Models for Risk Adjustment in Patients With Back Pain

Rundell SD, Resnik L, Kumar A, Heagerty PJ, Jarvik JG
Sean Rundell

2405 Sedentary Behavior Relationship With Physical Function in People With Type 2 Diabetes

Alothman S, Alshehri M, Alenazi A, Hoover JC, Rucker J, Pasnoor M, Kluding P
Shaima Alothman

2406 Relationship Between the Army Physical Fitness Test, Functional Movement, and Running Screening in ROTC Cadets

Williams S, Dunleavy K
Shelby Williams

2407 Development and Validation of a Quality Appraisal Tool for Validity Studies (QAVALS)

Gore S, Blackwood J, Goldberg A, Huang M, Shoemaker MJ

Shweta Gore

- 2408 Mechanisms and Targeting of Maladaptive Sensory Growth in the Development of Neuropathic Pain Following Spinal Cord Injury**
Rowe M, Conner B, Wonka A, Bray H, Jones TE, Brewer K, Bareiss SK
Sonja Bareiss
- 2409 Evaluation of Core Physical Therapy Curriculum and Elective Pain Neuroscience Education on Student Pain Neurophysiology Knowledge**
Yoder P, Ford B, Nare LW, Sturzebecher R, Neuman J, McBee K, Bareiss SK
Sonja Bareiss
- 2410 Comparison of Recumbent and Standing MR Image-Based Measurements of Hallux and First Metatarsal Kinematics: Implications for the Study of Hallux Valgus Deformity**
Battaglia TJ, Davis AC, Jilk LF, Moore AR, Smith K, Glasoe WM
Ward Glasoe*
- 2411 The Effects of Short-Duration High-Power Posing on Timed Up and Go Test**
Ge W, Schaefer D, Basile L
Weiqing Ge
- 2412 Does Evidence-Based Practice Confidence and Behavior Change Throughout the Entry Level Physical Therapy Curriculum? A Longitudinal Study**
Romney W, Deutsch JE, Perry S, Salbach N
Wendy Romney
- 2413 The Pain and Disability Drivers Management Model: A Comprehensive Conservative Non-pharmacological Management Model for Mechanical Low Back Pain**
Tousignant-LaFlamme Y, Martel M, Joshi AB, Cook CE
Yannick Tousignant-LaFlamme
- 2414 Variability of Motor Evoked Potentials in Gluteus Maximum and Vastus Lateralis During Transcranial Magnetic Stimulation**

Shih Y, Armour Smith J, Powers C, Fisher BE

Yo Shih

2415 Evaluation of Trials Necessary to Achieve Performance Stability in a Reaching Kinematics Movement Analysis Game

Chen Y, Garcia-Vergara S, Howard A

Yu-Ping Chen

Sports Physical Therapy: Biomechanics

2417 Effects of a Yoga Intervention on Collegiate Baseball Players

Di Francesco A, Cole ZA, Belyea B

Barbara Belyea

2418 Differences in Lower Extremity Energy Absorption Contribution Between Age Groups in Healthy Female Athletic Cohorts During a Jump Landing Task

Sherman D, Garrison J, Goto S, Creed K, Bothwell J, Hannon J

David Sherman

2419 Unilateral Vertical Jump Performance Measures Have Moderate to Good Between-Session Reliability

Ilardi D, Knight E, Farmer B, Katsavelis D, Grindstaff TL

Dominic Ilardi

2420 Limb Dominance and Symmetry During Functional Performance Tests

Norris E, Burke E, Newton M, Sydnor TV, Turner M, Furgal KE, Wallmann HW

Elizabeth Norris

2421 Acute Effects of a Yoga-Based Warmup Compared to a Traditional Dynamic Warmup on Measures of Athletic Performance

Norris E, Renfrow B, Hartig C, Jones B

Elizabeth Norris

2422 Gait Assessment in Collegiate Athletes: Do History of Concussion, Symptoms, and Gender Matter?

Messerschmidt EL, Hall E, Ketcham CJ, Patel K, Vallabhajosula S

Emily Messerschmidt

- 2423 Vert and Vertec Are Valid Clinical Measures of Vertical Jump Height**
Knight E, Ilardi D, Farmer B, Katsavelis D, Grindstaff TL
Eric Knight
- 2424 Analysis of Pelvic and Navicular Movement During Barefoot and Shod Running**
Brinkman H, Cygan A, Fredericks C, Plemel RJ, Thorton E, Yanchek A, Rhoades J, Schindler G
Gary Schindler
- 2425 The Relationship Between Asymmetries in Single-Legged Hop Tests and the Drop Jump Task**
Winden H, Arundale AJ, O'Rourke P, Logerstedt D, Snyder-Mackler L
Haylee Winden
- 2426 Use of Inertial Motion Capture System to Assess Kinematics in Adolescent Baseball Pitchers**
Timmerberg JF, Said R, Crossan T, Lloyd S, Naftilan M, Schlobach N, Omofuma I, Agrawal SK, Lynch T
Jean Timmerberg
- 2427 Differences in Lower Extremity Net Energy Absorption and Energy Absorption Contribution Between Healthy Adolescent Female Soccer and Basketball Players**
Hannon J, Goto S, Bothwell J, Garrison J
Joseph Hannon
- 2428 Setting the Seat for Better Bicycling: A Systematic Review**
Wason K, Walker B, Mersino A, Swanson B, Christopher SM
Kathryn Wason
- 2429 Head Acceleration During Girls Youth Soccer Using Real-Time Data**
Messerschmidt EL, Van Patten K, Lee RJ, Vallabhajosula S
Katlyn Van Patten

- 2430** **Inspiratory Duration Is Significantly Related to Hypoxic Index in Division 1 Collegiate Female Swimmers**
Fraga K, Ali A, Graves K, Patel N, Vogel-Castellanos BL, Mandel D, Cahalin LP
Kelli A Fraga
- 2431** **The Effects of Suspension Devices on Muscle Activation During Exercise: A Systematic Review**
Manzanares K, Mullahy K, Jaimes C, Volkel DR, Myers H, Cook CE
Krista Manzanares
- 2432** **Performance of Youth Baseball Athletes on the Functional Movement Screen™**
Smith L, Lwin JM, Mamuyac RT, Swift T
Laura Smith
- 2433** **Reliability of Biomechanical Measures and Their Concurrent Validity With the Lower Extremity Function Scale (LEFS)**
Selby-Silverstein L, Reigel K, Lockwood A, Desiderio AN, Daly P, Essick J
Lisa Selby-Silverstein*
- 2434** **University Student Experience With Leg Pain: A Survey Study**
Selby-Silverstein L, McCurdy EP, DeLong R, Toribio J, Eberspacher A, Weidman M
Lisa Selby-Silverstein*
- 2435** **The Prevalence of Injury Risk and Neuromuscular Dysfunction Within USA Olympic Field Hockey**
Lehr ME, Cheek WL, Dacko S
Michael Lehr
- 2436** **Hip Pain and Range of Motion Improve With Core Stabilized FABER and NMES to the Lumbar Extensors During FABER Test: A Case Series**
Steimling M, Sung W
Michael Steimling

- 2437 Dehydration Reduces Posterior Leg and Trunk Flexibility and Increases Stiffness in Male Collegiate Age Runners**
Ullucci PA, Casa D, Matthews TD, Rosene JM
Paul Ullucci
- 2438 The Effects of Previous Lower Extremity Musculoskeletal Injury on the Use of the Somatosensory System for Postural Control in Male High School Soccer Players**
Cogswell R, Hippler-Brant M
R Heath Cogswell
- 2439 Influence of Gaze Stability on Injury Incidence in NCAA Division II Athletes**
Bliss R, Long A, Niederee A, Anderson C, Smith H, Quinlin K, Wrisley D
Rebecca Bliss
- 2440 Effectiveness of Kinesiology Tape on Sports Performance Abilities in Athletes: A Systematic Review**
Reneker JC, Latham L, McGlawn R, Reneker M
Ryan McGlawn
- 2441 Myofascial Cupping in Conjunction With Dynamic Stretching: Effect on Hamstring Extensibility**
Hefferon T, Gesicki S, Beamer J, McNamara K, Neely S
Tamara Hefferon
- 2442 The Medial Knee Position at Initial Contact of the Drop Vertical Jump Is Strongly Correlated to the Knee Abduction Angle**
Guess TM, Hocker K, Gray A, Razu S, Kurkowski S, Sherman SL, Skubic M, Willis BW
Trent Guess
- 2443 The Acute Effects of Orthotics on Pitching Kinematics at the Ankle in Division I Collegiate Pitchers**
Feigenbaum LA, Roach KE, Martinez AR, Rapicavoli J, Oh J, Scavo VA, Kaplan LD, Eltoukhy M
Luis Feigenbaum

Sports Physical Therapy: Case Studies

- 2444 A Multimodal Approach to the Rehabilitation of an UCL-R in a Division I Baseball Pitcher**
Asken TR, Ruiz JT, Powell H, Scavo VA, Kaplan LD, Feigenbaum LA
Luis Feigenbaum
- 2445 Blood Flow Restriction Rehabilitation Improves Bone Stress Injury Return to Military Training Rate: A Case Report**
Dummar AR, Morel T, Buol-Edmunds SK
Abe Dummar
- 2446 The Complexity of a Traumatic Hip Dislocation: A Case Study**
Mumbleau A, Hewett TE, Jelsing E, Hurd W
Allison Mumbleau
- 2447 Alterations in ACL Injury Risk Factors Following ACLR and Rehabilitation: A Case Report**
Dix C, Arundale AJ, Smith AH, Seymour WG, Snyder-Mackler L
Celeste Dix
- 2448 Case Study: Swimmer's Shoulder in a 13-Year-Old Female**
Kunzer C
Corey Kunzer
- 2449 Return to Contact Following a Simple Elbow Dislocation in a Collegiate Rugby Player: A Case Report**
Meisel CE, Milovitch-Sera LK
Corinne Meisel
- 2450 I Am an Athlete: The Lived Experience of Athletes With a Physical Disability Participating on School-Based Sports Teams**
Freeman M, Chalanycz J, Fay D
Deanne Fay
- 2451 Presence and Severity of Symptoms in Student Athletes Post-Concussion: A Case Series on Return-to-Learn**

Pabian P, Rodriguez EL, Sack L, Toubman J
Elena Rodriguez

2452 Assessment of Strength Deficits Following Femoral Intramedullary Rod Placement in a Twelve-Year-Old Male Athlete: A Case Report

Tipp H, Cruse B, Curtis C, Schab M, Bean R, Blackwood J
Holly Tipp

2453 Examination of Jump Propulsive Forces on a NCAA Division 1 Wrestler 6 Months Post ACLR

Mann JB
James Mann

2454 Medical Classification of Injured Military for the DOD Warrior Games

Lucarevic JJ, Danberg S, Fowler J
Jennifer Lucarevic

2455 Effects of Neuromuscular Re-education With Jump Training in a Female Athlete With Increased Lower Extremity Risk for Injury

Brooks J, Elias AR, Mizner RL, Mischke JJ
Jessa Brooks

2456 Addressing Neurocognitive Impairments in a Division I Athlete Following Concussion: A Case Study

Sutton SZ, Seitz J, Bialosky JE
Stephen Sutton

2457 Implementation of a Return-to-Rowing Program for a Rower With Bilateral Popliteus Strains: A Case Study

Gellert J
Joshua Gellert

2458 Validation of an Age-Appropriate Screening Tool for Relative Energy Deficiency in Sport in Healthy Young Athletes, a Pilot Study

Granger JE, Foley CM, Ostrom M, Schulz JM, Trane K, Wolkin AE
Julia Granger

- 2459 Direct Access Screening and Correlation for Relative Energy Deficiency in Sport in Pediatric and Adolescent Patients**
Granger JE, Foley CM, Ostrom M, Schulz JM, Trane K, Wolkin AE
Julia Granger
- 2460 Knee Varus Movement Pattern Associated With History of Lateral Ankle Sprains in NCAA Division I Men’s Basketball Players—A Case Series**
Weisenberger K, Martens M, Fellow J, Beerbaum S, Ingram N, Ibarra SM, Abdenour TE, Rauh MJ, Gombatto S
Katelyn Weisenberger
- 2461 The Meaning of Participation in a Professional Integrated Dance Company for Individuals With and Without Disabilities**
Pantano KJ, Steinert R
Kathleen Pantano
- 2462 Post-operative Neuropraxia of the Radial Nerve: A Case Report**
Moran KA
Kelley Moran
- 2463 Rehabilitation of an Equestrian Athlete With a History of Multiple Sport-Related Concussions: A Case Report Describing the Development of a Return-to-Riding Protocol**
Gunter KB, Shields CJ, Ott SD, Coronado RA
Kelli Gunter
- 2464 The Potential Role of Primitive Reflex Disinhibition in a Concussed Individual**
Ziaks L, Brown C, Starkey C
Lauren Ziaks
- 2465 Foot Strike Retraining and Functional Lower Extremity Strengthening in Runners With Anterior and Lateral Knee Pain**
Donlon LT
Louise Donlon

- 2466** **The Effect of Fear-Reducing Education, Manual Therapy, and Core Stabilization on Chronic Low Back Pain in a 15-Year-Old Ballerina**
Graham MC, Purcell N, Hergenroeder AC
Megan Graham
- 2467** **Conservative Management of Bilateral Medial Epicondyle Avulsion Fractures in Competitive Adolescent Female Gymnast**
Turnwald MW
Michael Turnwald
- 2468** **MS Fit: Development of an Adaptive Group-Exercise Program for People With MS**
Purcell N, Patel RM
Nicholas Purcell
- 2469** **The Effect of Gait Retraining on Anterior Tibial Stress Syndrome in a 16-Year-Old Runner**
Purcell N, Wilson PB, Chorley J
Nicholas Purcell
- 2470** **Management of Acute Sports Injuries and Medical Conditions by Youth Soccer Coaches: Assessment Via Case Scenarios**
Blatchford J, Fraley R, Green BT, Huffman J, Senne S, Cross PS, Karges JR, Hauer PL
Patrick Cross
- 2471** **Management of an Adolescent Athlete With Significant Anxiety in a Post-concussion Syndrome Presentation Through Structured Therapeutic Exercise/Activity, Manual Therapy, and Cognitive Behavioral Therapy—A Single Case Study**
Ozdemirer RB, MacDonald CW
Rafael Ozdemirer
- 2472** **Team Approach to the Diagnosis and Management of an Adductor Longus Avulsion Injury in a Soccer Athlete: A Case Report**
Gusmer RJ
Rebecca Gusmer

- 2473 Persistent Bone Stress Injury in Female Military Academy Cadet: A Case Report**
Miller RP, Vraa DL
Ronald Miller
- 2474 A Preliminary Timeline for Integration of Visuo-vestibular Therapy in a Concussed Individual With Protracted Recovery**
Ziaks L, Giardina R, Kloos A
Rosemary Giardina
- 2475 High Flexion Movement Pattern Associated With Patellar Tendinopathy and Low Back Pain in NCAA Division I Men's Basketball Players—A Case Series**
Nalbandian SR, Medicke M, Lovell BR, Bancells K, Ingram N, Ibarra SM, Abdenour TE, Rosenthal M, Gombatto S
Sarah Nalbandian
- 2476 Multifactorial Physical Therapy Interventions for a Pediatric Patient After Sports-Related Concussion: A Case Report**
Smith S, Dunleavy K, Mattson C
Savannah Smith
- 2477 Blood Flow Restriction Rehabilitation Improves Bone Stress Injury Return to Military Training Rate: A Case Report**
Morel T, Dummar AR, Buol-Edmunds SK
Tracy Morel

Sports Physical Therapy: Foot/Ankle

- 2478 Development and Reliability Testing of the Dynamic Agility Lateral Performance Test (DALP) for Rehabilitation Progression and Criteria for Return to Sport**
Worst HS, Henderson N, Decarreau R, Davies GJ
Haley Worst
- 2479 A Comparison Between Single and Double Upright Ankle Braces on Ankle Range of Motion, Functional Performance, and Satisfaction of Brace Characteristics in Female and Male Collegiate Soccer Players**

Etnoyer-Slaski J, Bishop BN, Topp R, Greenstein J
Jena Etnoyer-Slaski

2480 The Successful Management of Persistent Mid-Portion Achilles Tendinopathy Using Sural Nerve Mobilizations and a Heavy-Slow Resistance Program in a Collegiate Softball Player

Mischke JJ, Matthew KM, Mizner RL
John Mischke

2481 Effects of Single Upright, Double Upright, and Lace-Up Ankle Braces on Vertical Jump Performance in Female College Volleyball Players

Jefferson AM, Casper G, Neuman J, Brosky JA, Topp R
Joseph Brosky

2482 The Immediate Effects of Gastrocnemius Stretching With and Without Self-Myofascial Release on Ankle Kinematics

Corkery MB, Kapuza K, Le H, Murphy K, Friend K, Yen S
Marie Corkery

2483 A Comparison of Arch Height Index Measures Between Collegiate Basketball and National Basketball Association Players

Anloague P, Strack D, Eaton C, Corbeil J, Short S, Barhorst L, Hess N, Hock G, Iannarino A, Turner A, Williams CA
Philip Anloague

2484 Long-Term Effect of Balance Training and Bracing in Reducing the Incidence of Ankle Sprains in the Athletic Population: A Systematic Review

Bellows R, Wong CK
Rachel Bellows

2485 Mobile Plantar Pressure Loading Assessments in Patients With an Achilles Tendon Rupture

Aufwerber S, Silbernagel KG, Ackermann PW
Susanna Aufwerber

**2486 Diagnosis and Management of Refractive Ulnar Neuropathy at the Elbow
in a High School Baseball Pitcher**

Hellem AR, Jelsing E, Hewett TE, Hurd W

Aaron Hellem

**2487 The Utilization of Interval Throwing Programs in the Physical Therapy
Setting—A Cross-Sectional Survey**

Hedt C, Holland SB, Lambert BS, Harris JD, McCulloch PC

Corbin Hedt

**2488 The Effect of Decreasing Thoracic Support on the Thickness of the Lower
Trapezius and Paraspinal Muscles: Implications for Exercise Positioning**

Witt D, Talbott N, Blanford E, Zeleznik A

Elizabeth Blanford

**2489 Is Shoulder Range of Motion Associated With Baseball Arm Injuries: A
Systematic Review and Meta-analysis**

Bullock GS, Faherty MS, Ledbetter L, Thigpen CA, Sell TC

Garrett Bullock

**2490 Comparing Contract-Relax Stretching Versus Dynamic Stretching on
Latissimus Dorsi Extensibility and Throwing Velocity in High School
Baseball Players**

Aaby KL, Reichmann A, Christensen M, Joshi N, Ratzlaff C, Manske R, Smith BK

Kara Aaby

**2491 Influence of Limb Dominance and Shoulder Injury on Strength and
Explosive Force in US Marines**

Poploski KM, Winters JD, Picha KJ, Royer SD, Heebner NR, Lambert B, Getsy W, Abt JP

Kathleen Poploski

**2492 The Immediate Effects of Visual Ultrasound Biofeedback on Lower
Trapezius Thickness During Overhead Movements**

Witt D, Talbott N, Nemann K

Kathryn Nemann

2493 Risk Factors for Ulnar Collateral Ligament Injury in Baseball Amateurs and Professionals: A Systematic Review

Walker MD, DeLang MD, Gudde L, Kilborn E, Fischer K, Thigpen CA, Reiman MP

Merritt Walker

2494 The Relationship Between Glenohumeral Joint Rotational Range of Motion and Shoulder Injuries in NCAA Division II Swimmers

Sprague PA, Young WT, Puglisi B, Gatens DR, Rodriguez R

Peter Sprague

2495 The Impact of Patient Positioning When Assessing Hip Rotation Range of Motion in Adolescent Baseball Pitchers

Said R, Timmerberg JF, Lynch T

Rami Said

Sports Physical Therapy: Spine

2496 The Prevalence of Spondylolysis in Symptomatic Adolescent Athletes: An Assessment of Sport Risk in Non-elite Athletes

Selhorst M, Peters EG, Fischer A, MacDonald JP, Padgett N

Nick Padgett

2497 Relationships Among Common Vision and Vestibular Tests in Healthy Recreational Athletes

Heick J, Bay C, Valovich McLeod T

John Heick

2498 Acute Effects of Neural Gliding on Athletic Performance

Gacek M, Davis H, Kirby B, Saia C, Waldhelm A

Marissa Gacek

2499 Abdominal Muscle Size and Symmetry Are Related to Core Performance

Rice RP, Milian EK, Adler A, McElroy M, Padin K, Gendron B, Erin M, Harris S, Raya M

Robyn Rice

Group 3: Saturday, February 24

Aquatic Physical Therapy

- 3002** **The Effects of an Aquatic Manual Therapy Technique, AquaStretch, on Recreational Athletes With Lower Extremity Injuries**
Alejo T, Huss J, Shilhanek C, McGrath M, Heick J
John Heick
- 3003** **Biomechanical and Physiological Effects of Shallow Water Locomotion in Healthy Adults**
Sola M, Allison M, Cusick M, Franek M, Murray MR, Clewley D
Michael Sola
- 3004** **Effectiveness of Aquatic Therapy on Increasing Range of Motion and Decreasing Pain in the Rehabilitation of Patients With Shoulder Pathologies: A Systematic Review**
Leininger PM, Kearney DP, Lumia RJ, Siegel EF, Szemenyei S
Peter Leininger
- 3005** **Not All Strokes Are Like the Others: The Use of Aquatic Therapy to Access the Recovery of Automatic Movements Following Subcortical Tissue Damage**
Carter V, Tholman C
Valerie Carter

Education

- 3006** **Interprofessional Collaboration Education and Practice at Northern Arizona University: A Pilot Study**
Carter V, Jain TK, Randall D, Loeb AC, Harmon MT, Farrel C, Kroneberger L
Valerie Carter
- 3007** **International Immersion: An Elective Course in Guatemalan Culture, History, and Language With an Emphasis on Service Learning for DPT Students**
Anderson AL, Limbert K
Abigail Anderson

3008 Medical Spanish in the Physical Therapy Curriculum: A Quantitative Study on Students' Perceptions and Outcomes

Laprea A

Adrianna Laprea

3009 Fostering Critical Thinking Skills by Bridging Science With the Art of Patient Care—Integrating Health Humanities Into Neurorehabilitation Curriculum

Nogi AL, Zajac-Cox L, Blanton S

Allison Nogi

3010 Exploring the Relationship Between First-Year DPT Students' Self-Efficacy, Approaches to Learning, and Exam Scores Over the Course of an 8-Week Intensive Anatomy Course

Heath A, Dooley C, Iturry A, Sherrerd K, Slate C

Amy Heath

3011 Measuring Clinical Reasoning Across a Physical Therapy Curriculum: A Pilot Study

McDevitt AW, Rapport MK, Furze J

Amy McDevitt

3012 Effectiveness of Online Interprofessional Education for Teamsteps Training

MacCabe A, Castillo M, Lucas Molitor W

Angela MacCabe

3013 Same Issues, Different Class: Shared Challenges in Critical Thinking Between Cohorts of a Doctorate of Physical Therapy Program

Campbell A, Willis BW, Sayers S, Beal E, Gibson K

Anita Campbell

3014 Changing the Way They Think: Integration of an Explicit Mixed Method Critical Thinking Approach for 1st Year Doctor of Physical Therapy Students

Campbell A, Willis BW, Sayers S, Beal E, Gibson K

Anita Campbell

- 3015 Impact of Simulation on Student Confidence in an Interprofessional Training Program**
Golub-Victor A, Allen E, Duffy K, McEvoy C, Philbrick K, Greenwood KC
Ann Golub-Victor
- 3016 Mentoring Programs for Faculty and Clinicians in Research and Teaching**
Vendrely AM
Ann Vendrely
- 3017 Evaluating Student Perceptions, Learning Outcomes and Long Term Recall in a 3-Week Intensive Graduate Course: Laptop Versus Traditional Hand Written Notes**
Lorio AK, Carruth L
Anne Lorio
- 3019 Improve Student Performance With Virtual Reality Simulation in Acute Care Education: A Theory Report**
Crow AA, Hoke E
Ashley Crow
- 3020 Which Admissions or Educational Factors Are Good Predictors for Success in the First Attempt of the National Physical Therapy Examination in a Non-traditional Program?**
Ozcan Edeer A, Olson V, Euaparadorn E
Ayse Ozcan Edeer
- 3021 Are Pre-requisite GPA, Program GPA, and Practice Board Scores Predictive of Success on the NPTE?**
Ennis B
Beth Ennis
- 3022 The Use of Medicinal Cannabis for Pain**
Stockert B
Brad Stockert

- 3023** **Changes in Self-Assessed Clinical Reflection and Reasoning Following the First Year of a Doctorate of Physical Therapy Program**
Willis BW, Campbell A, Sayers S, Beal E, Gibson K
Bradley Willis
- 3024** **Identification of Shared Challenges in Clinical Reflection and Reasoning Between First, Second, and Third Year DPT Students**
Willis BW, Campbell A, Sayers S, Beal E, Gibson K
Bradley Willis
- 3025** **Physical Therapy Services in a Student-Led Pro-Bono Clinic: A Descriptive Study**
Pratt B, Holshouser K, Shadid PJ
Brenda Pratt
- 3026** **Fellowship Graduate Survey: Student and Graduate Scholarly Activity**
Neilson B, Whitman JM, Shepherd M, Janicky T, Garcia B, Stevens B
Brett Neilson
- 3027** **Assessing the Knowledge and Attitudes of Physical Therapy Students Regarding the Treatment of Lesbian, Gay, Bisexual, and Transgender Patients**
Yacono A, Patel V, Howard G, Schasberger B, Logerstedt D
Britta Schasberger
- 3028** **A Qualitative Analysis of Early Integrative Clinical Experiences Across Two Clinical Settings**
Greenfield B, Bridges PH, Phillips T, Smith DL
Bruce Greenfield
- 3029** **Athletic Pubalgia and Its Anatomy, Pathology, and Treatment Implications: Integration of Clinically Relevant Anatomy Into the 3rd Year of a Doctor of Physical Therapy Program**
Rahter BA, Amabile AH
Bryan Rahter

- 3030 Investing in Present and Future Physical Therapist Educators and Researchers: A Novel Scholarship and Mentorship Program**
Paydo CA, Ulanowski E, Danzl M
Calli Paydo
- 3031 Impact of a Student Profile Blog on Prospective Applicants' Decisions on DPT Program Selection**
Passarelli C, Noteboom T, Thomas S, Backward CG, Smith AC
Carol Passarelli
- 3032 Students' Judgments of Their Professional Generic Abilities: Do Faculty Agree?**
Ortega C, Simmonds MJ, Geelhoed MA
Catherine Ortega
- 3033 Poor Sleep Hygiene Is Associated With Impulsivity and Decreased Discrimination on Continuous Performance Task in Doctor of Physical Therapy Students**
Schaaf J, Hollenbeck P, Siengsukon C
Catherine Siengsukon*
- 3035 Innovative Clinical Faculty Development: A Strategic Roadmap to Change Attitudes, Beliefs, and Adoption of the Clinical Collaborative Model**
Engelhard C, Leugers R, Ambrose S, Murphy C
Chalee Engelhard
- 3036 More Than Employment and Pass Rates: Assessment-Driven Academic Program and Workforce Partnerships**
Howard CD, Case R, Kikillus P, Chavin H
Christina Howard
- 3037 Acute Care Standardized Patient Practical Improves First-Year DPT Confidence in Clinical Reasoning**
Lysaght C, Meardon SA, Merricks P, Hodson P
Christine Lysaght

- 3038 Mood Differences Between Three Cohorts of Doctor of Physical Therapy Students**
Boolani A, Fulk G, Lafay V, Reid J, Towler C, Martin RA
Christopher Towler
- 3039 Differences in Physical Activity Levels Across Three Cohorts of Doctor of Physical Therapy Students**
Boolani A, Fulk G, LaFay V, Reid J, Towler C, Martin RA
Christopher Towler
- 3040 Simulation in Physical Therapy Education: Improvements to an Instructional Model in a Cardiopulmonary Interventions Course**
Robbins CE, Hein C, Moinzadeh L
Christina Hein
- 3041 Influence of a Post-graduate Residency Program on Transforming Practice Through Peer Mentoring in Nairobi, Kenya**
Leickly C, Cunningham S, Herbel K, Jackson R
Clarissa Leickly
- 3042 Health Literacy on a College Campus**
Gazsi CC, Leid WD, Pierce CS, Pierce HE, Matthew SG
Claudia Gazsi
- 3043 Self-Testing Improves Examination Performance in a Physics-Based Biomechanics Course Module: A Case Report**
Wassinger CA
Craig Wassinger
- 3044 Physical Therapists' Knowledge and Self-Efficacy Regarding Bone Health and Osteoporosis**
Gill CH, Coad K, Wooters C, Gigioli M, Russo K
Cynthia Gill
- 3045 Using Behavioral Messaging to Bridge the Gap Between the Academic and Clinical Environments**

Pinto D, Harter C, Peterson C, Reed E, Arquines CA, Henderson HK, Van Der Laan KF

Daniel Pinto

3046 Novel Course Design for Teaching Segmental Assessment of Trunk Control

Bellows D, Saavedra S, Schroeder L

Danielle Bellows

3047 Engaging Students in Experiential Learning Related to Injury Prevention in Athletes: A Pilot Study

Schilling D, Radwan A

David Schilling

3048 An Investigation of Entry-Level Doctor of Physical Therapy Student Perspectives of Peer Evaluation

James D, Weeks-O'Neal N, Oh J, Brown T

Dawn James

3049 Implementing a Wellness Clinical Practicum Year One to Decrease DPT Students' Risk of Burnout

Ickes D

Dawn-Marie Ickes

3050 Cultural Competence Development During an Entry-Level Doctor of Physical Therapy Program

Diaz D

Deborah S Diaz

3051 Igniting a Passion for Leadership Through an Intraprofessional Student Leadership Symposium

Sellheim DO, Scholl J

Debra Sellheim

3052 Improving Interprofessional Critical Thinking and Collegiality Through International Health Mission Trips

Walsh DJ, DeSandre C

Donald Walsh

- 3053 An Intra-institution Learning Collaboration: The Springfield College DPT Program and Dance Repertoire Alliance**
Montemagni EA, Maxwell J
Elizabeth Montemagni
- 3054 International Experience in Healthcare: Increasing Interprofessional Competence**
Smith RL, Mulligan E
Elizabeth Mulligan
- 3055 Simulating the Acute Care Environment in the Academic Setting: Impact on Student Knowledge, Skills, and Behaviors**
Costello E, Caylor N, Duniak M, Cordrey R
Ellen Costello
- 3056 Physical Therapist Students' Perceptions Regarding the Role of Their Center Coordinator of Clinical Education**
Belanger M, Ciorciari C, Darnsteadt J, Kujan N, Booth J, Cusson M, Wetherbee E
Ellen Wetherbee
- 3057 Quantifying Clinical Instructor Time in Student Mentorship During Full Time Doctorate of Physical Therapy Clinical Internships**
Bibo J, Lehman EL, Palmer R, Odren D
Emilie Lehman
- 3058 Advancing the Knowledge Transfer System Via Social Media: Collaboration Between Academic and Clinical Partners**
Riley E, Fitzgerald CJ, Steinbarger K, Cesario C
Erin Riley
- 3059 Attitudes of Physical Therapy and Dental Hygiene Students Toward Interprofessional Education a Pilot Study**
Kistner FE, August JN, Smilyanski I
Frances Kistner

- 3060 Reflections on Planned Interprofessional Education Sessions for Doctor of Physical Therapy and Doctor of Occupational Therapy Students**
Bates F, Peterson E
Frank Bates
- 3061 Weight Bias Among Healthcare Professionals: A Paradigm Shift for Physical Therapy**
Flora GT
Grace Flora
- 3062 Resident Mentoring: Exploration of the Teaching and Learning Process Through Assessment and Facilitation of Skills**
Knight HE, Furze J, Jensen GM
Heather Knight
- 3063 Promoting Cultural Competency Education in Physical Therapy Curriculum**
Garg H, Tenbrink JD
Hina Garg
- 3064 Internal Consistency and Construct Validity of an Adapted Clinical Cultural Competency Questionnaire (CCCQ-PRE) Instrument in Entry-Level Physical Therapy Students**
Garg H, Tenbrink JD
Hina Garg
- 3065 The Use of Quantitative Variables to Predict NPTE Success: A Pilot Study**
Dehan J, Meiners KM, Humphrey J, Zimmerman C, Greene N, Hickerson K, Parks A, Walker A, Yeager K, Bolton JB
Jamie Dehan
- 3066 Physical Therapy Students' Attitudes Toward Service-Learning**
O'Connell JK, O'Connell DG
Janelle O'Connell
- 3067 Change in Cognitive Learning Strategies Between Year One and Year Two Doctor of Physical Therapy (DPT) Students**
Lovett J, Lane H, Roberts J, Coley E, Umbarger L

Jared Lovett

- 3068 Implementation of Recommendations for Teaching Evidence-Based Practice in a Physical Therapy Curriculum**
Lau JD
Jeffery Lau
- 3069 Ultrasound Measurements of Intra-articular Movement of the Metacarpophalangeal Joint: Reliability of Physical Therapy Students**
Talbott N, Witt D, Brown J, Humason S
Jeffrey Brown
- 3070 Participation in an Adapted Gymnastics Program: Student Volunteer Perspectives**
Diermann J, Leonard A, Krug JB
Jeffrey Krug
- 3071 Participation in an Adapted Triathlon: Student Volunteer Perspectives**
Friesen KA, Diermann JT, Krug JB
Jeffrey Krug
- 3072 What We've Learned: The Four-Year Evolution of a Pro Bono Clinic Integrated Into a PT Curriculum**
Wilde B, Mullen J, Cotton S, Lucas JA, Blow C, Krug JB
Jeffrey Krug
- 3073 Use of Art to Enhance DPT Students' Observation Skills: A Pilot Project**
Collins JE, Podschun L, Litten CL
Jennifer Collins
- 3074 Benefits of a Clinical Mentor Program for New or First-Time Clinical Instructors in an Academic Medical Center**
Cunningham J, Hunter H, Sauro GM
Jennifer Cunningham
- 3075 Comparison of a Novel Immediate Feedback Tool Versus Scantron on Student Retention of Knowledge: A Pilot Study**

Dickson J, Maher SF, Reid K

Jennifer Dickson

3076 Communicating With Persons With Cognitive Impairment: Improving Physical Therapy Students' Effectiveness Through a Blinded Role-Play Simulation

Mullen J, Willis BW, Prost EL

Jennifer Mullen

3077 Using Student Assessment in Guiding Course Changes in a PTA Course

Reft JL

Jennifer Reft

3078 Incorporating Health Risk Assessments and Biometric Screenings to Build a Culture of Wellness on Campus

Taylor M

Mary Jean Taylor

3079 Interprofessional Education Through a Monthly Stroke Support Group

Mayer JE, Fishel S, Valdez Taves J, Rogalski Y, Elich Monroe J, Gras LZ

Jill Mayer

3080 Toward a Digital Diagnosis in Physical Therapy

Jezirowski JJ

John Jezirowski

3081 Perceptions of Patients and Providers Regarding an International Interprofessional Short-Term Healthcare Service Trip

Day JM, Fell DW, Bennett AL, Cobbs K, Ehrhardt P, Wesson M

Joseph Day

3082 Promoting Interprofessional Collaboration in a Student-Led Pro Bono Clinic

Dewane JA, Krug H

Judith Dewane

- 3083** **Implementing a Hybrid Online/On-Campus DPT Program at a Research-Intensive Institution: A Protocol for Comparing Learning Outcomes With an Existing Residential Program**
Tilson JK, Gordon J, Andersen M, Dominguez JF, Havens KL, Hershberg J, Kirages DJ, Landel R, Robertson E, Simpson MS, Stevenson J
Julie Tilson
- 3084** **Intra-professional Relationships in Clinical Practice: Preparedness to Delegate and Supervise**
Hanks J, Rogers C
June Hanks
- 3085** **Clinical Instructors' Perceptions of Effective Clinical Instructor Behaviors: A Pilot Study**
Ozga KL, Kenyon LK, Roberts B, Schweitzer B, Strong WJ, Stephenson P
Karen Ozga
- 3086** **Use of Team-Based Learning in an Entry-Level Physical Therapist Education Course**
Peters K
Karma Peters
- 3087** **Analysis of Postprofessional DPT Student Outcomes: A Retrospective Study**
Holmer K, Stevermer CA
Katharine Holmer
- 3088** **Comparison of Anxiety Levels in DPT Students Between 3 Programs With 2 Different Curricula**
Macauley K, Plummer L, Bemis C, Brock GJ, Larson C, Spangler JE, Dutton L, Riley E
Kelly Macauley
- 3089** **An Interprofessional, Team-Based Service Learning Model for Professional Student Physical Therapists and Physical Therapy Residents**
Nelson K, Domina A, Ford F
Kelly Nelson

- 3090 Use of an Isolated Elements Design to Teach Observational Gait Analysis: Influence on Cognitive Load and Learning Outcomes**
Sass K
Kelly Sass
- 3091 Taking the NPTE Board Exam Early Is Associated With Higher Scores in Academically Similar Groups of Physical Therapy Students**
Stephens K, Gibson K
Kelly Stephens
- 3092 The Effects of Mind Mapping on Critical Thinking and Metacognition in Health Profession Students**
Kosior KA, Hakala C
Kenneth Kosior
- 3093 Assessing Multimodal Learning Preferences Among First-Year PT, OT, and PA Graduate Students in a Foundational Human Gross Anatomy Course**
Thomas KJ, Dinolfo JD, Denham BE, Annan-Coultas DL
Kenneth Thomas
- 3094 Developing Clinical Reasoning Skills in Entry-Level PT Students Using the ICF as a Framework**
Helgeson K, Smith A
Kevin Helgeson
- 3095 How Does International Service Experience Affect Professional Development in Physical Therapy Students? A Systematic Review**
McNeal B, Jones K, Doe E, Lander E, Wickenheiser A
Kevin Jones
- 3096 About Town: A PT/OT Intra/Interprofessional Community Re-entry Learning Experience**
Smith K, Lauer A, Aldridge N, Rone-Adams S
Kim Smith
- 3097 Interprofessional Education (IPE): Where to Begin**

Beran-Shepler K, Poling D, LaBarbera D
Kimberly Beran-Shepler

- 3098 The Impact of a Language Barrier on the Diagnosis and Prognosis of Comorbid Shoulder and Cervical Dysfunction: A Case Report**
Buckingham K
Kimberly Buckingham
- 3099 Predictors of Doctor of Physical Therapy Program Success and National Physical Therapy Examination Passage**
McDow K, Siyufy A, Huth RM, Aron A
Kimberly McDow
- 3100 Are Physical Therapy Students Ready to Meet the APTA's #ChoosePT Initiative? A Survey of Entry-Level Physical Therapy Curricula and Student Knowledge**
Harder BJ, Bodfish WJ, Hughes JT, Skagen NA, Angelopoulou K, Irion JM, Wassinger CA
Kristi Angelopoulou
- 3102 A Cross-Sectional Study of Empathy Among Students at Two Doctor of Physical Therapy Programs in Boston**
Holmes M, Starr JA, Driscoll LC, Murphy E
Laura Driscoll
- 3103 A Comparative Evaluation of Online and Live Training in a Parkinson-Specific Physical and Occupational Therapy Approach**
Guse' L, Fox CM, Ramig LO
Laura Guse'
- 3104 A Literature Review: How Does Simulation-Based Education Effect Rehab Student Self-Efficacy in Acute Care?**
Martin-Johnstone LM
Laura Martin-Johnstone
- 3105 Development of Core Values Through a Student-Derived Community Exercise Program**

Leahy TE, Patterson L, Cleveland ED

Laura Patterson

- 3106 Lessons Learned: Medical Imaging, Nursing, and Physical Therapy: Interprofessional Bedside Simulation and Implications for Collaborative Practice and Improved Patient Safety**

Brogan L, Karnish K

Laurie Brogan

- 3107 Development and Validity of the Student-Run Outpatient Physical Therapy Experience Survey**

Brown T, Cavage M, Dean EM, Padegimaite L, Bachman T, Williams S

Lina Padegimaite

- 3108 Use of an Academic Professional Behavior Assessment and Intervention to Promote Professional Socialization**

Dorsey LL, Lojovich JM

Lisa Dorsey

- 3109 Perceived Levels and Sources of Stress Among Doctor of Physical Therapy Students**

Dutton L, Anderson C, Medinger K, Nordahl C, Orman D, Scott S

Lisa Dutton

- 3110 Impact of the Interview Process on Student Decision Making When Choosing a Physical Therapy Program**

Gusman LN, Drevyn E, Kirk-Sanchez NJ, McElroy M, Vega J, Raya M

Lori Gusman

- 3111 Who Do Doctor Physical Therapy Students Work With During Clinical Education Experiences**

Jeffries L

Lynn Jeffries

- 3112 Changes in Type and Frequency of Coping Strategies Used by Physical Therapy Students to Manage Stress and Burnout**

Williams P, Bade S, Mueller M

M Karen Mueller

- 3113 Use of an Experiential-Learning Elective to Develop Pre-Health Professional Students' Skills and Abilities for Collaborative Pediatric Practice During a Community-Based Event**
Wendland MT, Magiera L, MacPherson J
Madalynn Wendland
- 3114 Development of an Interprofessional Service Learning Program Targeting Health Disparities Within Navajo Nation**
Flis J, Miller AS, Keptner KM, Wendland MT
Madalynn Wendland
- 3115 "Perspectives on Practice": A Student-Created, Student-Led Elective and Its Place in the DPT Curriculum**
Stewart MK, Lipsky JL, Whited SD
Mahlon Stewart
- 3116 Professionalism Evaluation Program: Influence on Faculty and Staff Development Within an Academic Physical Therapy Program**
Becker M, Dudley-Javoroski S, Sass K, Shields RK, Kimball A
Amy Kimball
- 3117 Interprofessional Simulation Enhances Nursing Program Outcomes**
Swift MC, Stosberg T, Foley A, Brocksmith E
Marcie Swift
- 3118 Early Observation of First-Year Physical Therapy Students and Their Ability to Use a Handheld Dynamometer When Assessing Muscle Strength: A Pilot Study**
Walker M, Chung-Hoon K, Stoneman PD, McWhorter JW
Mark Walker
- 3119 Multi-year Study of Physical Therapy Students' Self-Reported Knowledge, Behaviors, Attitudes, and Values About Evidence-Based Practice in the Profession**
Holbein-Jenny M, Bensing B

Mary Ann Holbein-Jenny

3120 A Comparison of Doctor of Physical Therapy Students' Self-Rated Professional Behaviors to Standardized Patient Assessments

Riopel M

Mary Anne Riopel

3121 Implementing a Quality Clinical Education Experience: A Clinical Site Perspective

Dinkins MM

Maryane Dinkins

3122 Frequency and Types of Mobile Devices Used by Students in Physical Therapy Education

Lauderdale MH, McGlawn R, Weber M

Melanie Lauderdale

3123 2 Students With 1 Clinical Instructor: An Analysis of the Practice in a Physical Therapy Program

Wolff-Burke M, Bernal G, Buechner K, Musser K, Whitley J, Fergus A

Melissa Wolff-Burke

3124 Effects of 1-Week Pediatric Experiential Learning Course on the Clinical Thinking and Clinical Reasoning Skills of Physical Therapy Students

Flowers M, Yates CC, Lowe L

Meredith Flowers

3125 Project Hispaniola: Interprofessional Education at Its Best

Geelhoed MA

Michael Geelhoed

3126 Professionalism on a First Clinical Experience After Implementation of a Professionalism Module

Lewis MC, Folkins E

Michele Lewis

- 3127 Confirmatory Factor Analysis of the Physical Therapist Clinical Performance Instrument**
Wolden M, Hill B
Mitch Wolden
- 3128 Student-Centered Interprofessional Education: Reaching Beyond Traditional Academic Disciplines**
Hyland N, Mel A
Nannette Hyland
- 3129 Peer Teaching and Learning: Benefits of Two-Way Reciprocal Learning Activities to Increase Student Learning Outcomes in the Mock Clinic**
Borman NP
Nicole Borman
- 3130 Defending the Art of Physical Therapy: Expanding Inquiry and Crafting Culture in Support of Therapeutic Alliance**
Brun-Cottan N, McMillian DJ, Hastings J
Nicole Brun-Cottan
- 3131 Assessing Intercultural Competence in DPT Students**
DiBiasio P, Vallabhajosula S
Paula DiBiasio
- 3132 An Exploration of DPT Students' Interest in Pursuing Academia as a Professional Development Goal**
Gleeson PB, Ortiz G, Bucholz H
Peggy Gleeson*
- 3133 Impact of an Interprofessional Stroke Clinic on the Teamwork and Clinical Reasoning Abilities of Physical and Occupational Therapy Students**
Wellons RD, Doucet BM, Levitzky EG
Rachel Wellons
- 3134 A Student-Run Pro Bono Physical Therapy Clinic Incorporating Community-Based Learning: A Special Interest Report**
Hakim RM, Dolphin DA, Martzen J, Moser J

Renee Hakim

- 3135 The Impact of the Behavioral Interview on Decision Making in Physical Therapy Admissions**
Moya S, Dawson N, Pabian P, Brown E, Sonne JW, Richards JL
Samantha Moya
- 3136 A Systematic Review of the Effectiveness of Different Learning Strategies Within Gross Anatomy Courses: Cadaveric Dissection Versus Alternatives**
Wood S, Campbell D, Cronley L, Arnette A, Wigley C, Engle D, Covington K
Kyle Covington
- 3137 The Effects of a Service Learning Activity on Physical Therapy Students' Perceptions of Community Service**
Migliarese SJ, Molina-Henry DP, Aiken C, Barber DS
Sara Migliarese
- 3138 First-Year Doctor of Physical Therapy Student Views on Climate Change**
Jameson S
Sarah Jameson
- 3139 Models of Clinical Education in Doctor of Physical Therapy Programs: Description and Comparison to NPTE Pass Rates**
Howman J, Schleich S, Billings D, McChrystal K
Sarah Schleich
- 3140 Determining a Relationship Between Academic Performance of Graduate Physical Therapy Students and Chronotype**
Richardson S, Madamba ES, McKell R, Meppen C
Scott Richardson
- 3141 Effect of Extraversion on Physical Therapy Student Practical Exam Scores**
Richardson S, Zemanek Z, Downen T, Rich C, Weltzin N
Scott Richardson
- 3142 Providing Standards for Children With Special Needs in an Under-Resourced Community Through Interprofessional Education**

Hamilton S, Howman J
Shandra Hamilton

3143 How Learning Styles and Study Habits Influence Academic Success of Doctor of Physical Therapy Students

Varrecchia SN, Notaro N, Stiverson A, Kreh S
Shaun Varrecchia

3144 Husky ADAPT (Accessible Design and Play Technology): An Innovative, Interdisciplinary Collaboration for Education, Outreach, and Research

Israel S, Feldner HA, Nguyen B, Mollica MY, Caspi A, Hendricks D, Steele KM, Goodwin B
Shawn Israel

3145 Mind Maps as a Tool for Physical Therapy Students to Conceptualize Complex Neurologic Patient Management

Schroeder S, Ulanowski E, Danzl M
Shelby Schroeder

3146 Assessment of Novice Clinician Management of Acute Nonspecific Low Back Pain

Weiner S, Friedman A, Schindler S
Shira Weiner

3147 The Difficult Patient: A Novel Use of Standardized Patients in Physical Therapy Education

Shaibi SD
Stefany Shaibi

3148 Integrated Clinical Education (ICE) Case Study: A Student Perspective on a Medically Complex Patient in a Community Clinic

Gilboy S, Shaibi SD
Stephanie Gilboy

3149 Service Learning's Effectiveness at Improving Doctor of Physical Therapy Students Professional Skills

Elam SW, Ehrhardt AI, Rinella JE, Shuler PD

Stephen Elam

- 3150 Post-Traumatic Stress and Academic Performance Among Entry-Level Doctoral Physical Therapy Students in a Human Anatomy Cadaver Dissection Course**
Curfman SE, Austin GP
Sue Curfman
- 3151 Student Attitudes and Beliefs About Active Learning and the Impact of a Graduate Level Anatomy Course**
Curfman SE, Austin GP
Sue Curfman
- 3152 A Survey of Research Courses Utilized in United States DPT Program Curricula**
Barlow S, Hanks J, Tate JJ
Susan Barlow
- 3153 Understanding Good Research: Beyond the Classroom and Journal Club**
Klappa SG, Klappa SP, Adams JS, Cross PS, Dewald M, Hauer PL, Nelson H, Strong E, Wienk B
Susan Klappa
- 3154 Optimizing Low-Fidelity Simulation as a Teaching Strategy for Acute Care Evaluation and Treatment Prior to Clinical Internships**
Miale S, Krisch NJ
Susan Miale
- 3155 Experiences of First-Year Nursing, Physical Therapist, and Physical Therapist Assistant Students in a Collaborative Lab Setting**
Anibas M, McConkey A, Cobey C, Wenker SL
Susan Wenker
- 3156 International Educational Opportunities for Neurologic Residents**
Okere SD, Spivey S, Cariker G, Petroski D
Suzanna Okere

- 3157 An Exploration of Shared Decision Making Among Rehabilitation Students on a Service Learning Trip: A Phenomenological Investigation**
Zadnik M, Trotter SF, Werner TP
Suzanne Trotter
- 3158 Better Together: Over 10 Years of Student PT/PTA Collaborative Learning**
Struessel T, Reina L, Sage L, Nordon-Craft A
Tamara Struessel
- 3159 Physical Therapy Students' Perceptions of the Value of Scholarly Activity by Their Faculty**
Briedwell T, Martin D, Dannecker EA
Teresa Briedwell
- 3160 Student Perceptions of Academic and Clinical Preparedness Following Non-Cadaver-Based DPT Anatomy Course**
Brown T, Fraser C, Krautim CD, Woehlbrandt A
Teresa Brown
- 3161 No Lecture, No Problem: Flipping a Large Graduate Gross Anatomy Course**
Pierce RJ, Turner TT, Abraham KE
Thomas Turner
- 3162 Unforeseen Challenges During Implementation of a Student-Led Pro-Bono Clinic**
Enache T
Tiffany Enache
- 3163 Reliability of the Vertical Compression Test as Performed by Physical Therapy Students**
Enache T, Yoshida Y, Saliba Johnson V
Tiffany Enache
- 3164 The Use of Standardized Patients to Simulate Challenges in the Inpatient Setting**
Carey F, Enache T

Fred Carey

- 3165 The Impact of a Case-Based Interprofessional Education Experience Between Dental Students and Physical Therapy Students on Student Perceptions and Attitudes Towards Interprofessional Care**
Compton C, Macaluso NA, Marcantel J, Thompson JA, Gunaldo TP, Nelson TK
Timothy Nelson
- 3166 Movement Systems Diagnoses and Neuromuscular Conditions: Student Learning Following an Intensive Laboratory Experience**
Cook J, Lowry KA, Mercuris K, Bush TA
Traci Bush
- 3167 Effectiveness of Mindfulness Meditation Practice on Physical Therapy Student Anxiety**
Reddin VM, Andrews R, Chiappetta D, Disabato B, Schara S, Vinetti a
Vanessa Reddin
- 3168 Predictive Ability of Admission and DPT Program Factors on National Physical Therapy Examination (NPTE) Scores**
Reese NB, Bandy WD, Baldwin L, Moore K, Razon C
William Bandy*

Federal Physical Therapy

- 3169 The Effect of Vestibular Rehabilitation for an Acoustic Neuroma in an Active Duty Marine Status Post Retrosigmoid and Translabrynthine Approach: A Case Report**
Bloch A, Johnson KM
Amanda Bloch
- 3170 Does Step Rate Change Throughout a Two-Mile Timed Run?**
Weart A, Miller EM, Szymanek E, Goss DL
Amy Weart
- 3171 Longitudinal Comparison of Hippotherapy, Yoga, Aerobic Exercise, and Traditional Physical Therapy for a Military Veteran's Chronic Low Back Pain**

Aldridge Jr R, Lewis AM

Angela Lewis

3172 Validity of an Instrumented Sock and On-Shoe Sensor to Provide Biometric Feedback to Runners

Stoltenberg BE, Miller EM, Dolbeer J, Pickens B, Goss DL

Brian Stoltenberg

3173 Barriers to Wellness-Walking Program Participation for People With Lower Limb Loss

Wong CK, Sheppard J, Williams K

Christopher Wong

3174 The Importance of Acute Care Vestibular Physical Therapy Following a Traumatic Brain Injury in an Active Military officer: A Case Report

Conway D, David HS

Danielle Conway

3175 Utilization of the Progressive Return to Activity Following Acute Concussion Clinical Recommendations

Liroff ER, Schultz E, Roberts H

Elena Liroff

3176 The Concurrent Validity of Two-Dimensional Video Analysis for the Characterization of Foot Strike Pattern During Running

Miller EM, Watson D, Goss DL

Erin Miller

3177 Association Between Shoe Selection and Lower Extremity Injuries in United States Military Academy Cadets

Helton GL, Goss DL, Song J, Miller EM, Zifchock R, Neary M, Cameron K

Gary Helton

3178 The Relationship Between Timed Up and Go (TUG) Test and Psychological Measures in Chronic Pain: Implications for Intervention Design and Evaluation

Gansen J, DeVentura JL

Jennifer DelVentura

- 3179 Immediate Effect of Manual Therapy and Taping on Sub-acute Syndesmotic Ankle Sprains: A Case Series**
Shumway J, Vraa D
Joshua Shumway
- 3180 Intervention Fidelity Applied to Development of EVP-Mindful Movement Rating Scale: The Empower Veterans Program (EVP) Experience**
Gansen J, Ballengee L
Lindsay Ballengee
- 3181 Inspiratory Muscle Weakness Is Associated With Greater Anxiety and Dyspnea in Veterans With COPD**
Formiga M, Urdaneta GP, Vital I, A Campos M, Cahalin LP
Magno F. Formiga
- 3182 Integrating Physical Therapy Services Into the Patient-Centered Medical Home at Walter Reed National Military Medical Center**
Stidham M
Michael Stidham
- 3183 Living Well With Chronic Pain: A Novel Multi-disciplinary Approach to the Treatment of Patients With Chronic Pain Without Medications or Invasive Procedures**
Brown N, Wandner L, Greenberg E
Nicole Brown
- 3184 Design for Embedding Clinical Care Physical Therapist in a Warrior Transition Unit**
Rogers SM, Baker S
Shay Rogers
- 3185 Functional Status in Service Members With Deployment-Related Amputations**
Eskridge SL, McCabe CT, Watrous J, Sack D, Clouser MC, Galarneau MR
Susan Eskridge

3186 Tissues and Trauma: Developing Pain Neuroscience Education for Veterans With Post-Traumatic Stress Disorder and Pain

Benedict T

Timothy Benedict

3187 Pressure Needed to Achieve Complete Arterial Occlusion: A Comparison of Two Devices Used for Blood Flow Restriction Training

Weatherholt A, VanWye WR, Owens J, Lohmann J

William VanWye

Neurology: Balance and Falls SIG

3188 Retraining Sensory Weighting Using Virtual Environment and Vibrotactile Biofeedback

Hebron A, Schwarz B, Kowalewski V, Patterson R, Bugnariu N

Alejandra Hebron

3189 A Preliminary Investigation on the Neural Correlates of Human Dual-Task Walking

Newton A, Nyangani I, Vanasse RL, Palm K, Goh H

Alex Newton

3190 Does Hands-On Guarding Influence Performance on the Functional Gait Assessment?

Robinson BS, Shaw JL, Himes MK, Daniel T, Mosley G, Holland L, Kraft CM, Mulcahey R

Barbara Robinson

3191 Validity of the NeuroCom VSR™ Balance System

Robinson BS, Himes MK, Shaw JL, Jung TJ, Brad KJ

Barbara Robinson

3192 Improving Balance Through Virtual Reality and Physical Therapy Integration

Esguerra BS, Johnson KM

Kristen Johnson

- 3193 Backward Walking Speed Shows Potential to Serve as an Indicator of Mobility Impairments in Community-Dwelling Stroke Survivors**
Balasubramanian C, Clark DJ, Hawkins KA, Alqahtani F, Fox EJ
Chitra Balasubramanian
- 3194 Getting BIG in the Community: An LSVT BIG Pilot Program**
Odeh CE, Baker M, Nahlik B, Epperson KF
Mary Katherine Baker
- 3195 Exercise-Based Intervention for Adults With Parkinson's Disease to Improve Functional Outcome Measures in Ambulation and Balance**
Voltmer C, Kume J
June Kume
- 3196 The Use of a Wearable Sensory Prosthesis to Improve Gait and Balance in a Patient With Peripheral Neuropathy**
Wrisley D, McLean G, Oddsson L
Diane Wrisley*
- 3197 Predicting Future Falls in Community-Dwelling Older Adults Using the Berg Balance Scale**
Skornyakov E, Cleary KK
Elena Skornyakov
- 3198 Suitability of a Narrowing Beam Walking Task to Assess Balance in Acute Incomplete Spinal Cord Injury: A Case Report**
Catlin E, Kahn JH, Gordon KE, Sawers A
Elizabeth Catlin
- 3199 Use of the Brief-BESTest to Assess Balance Impairment and Target Balance Interventions for People With Subacute Stroke: A Pilot Study**
Johns E, Wamsley CA, Whiting AC
Eric Johns
- 3200 How Visual Background Field Link to the Postural Control Strategy in the Virtual Reality Environment**
Conner J, DeSandre J, Dreyer J, Eggers C, Huskins H, Shaw K, Park E

Eunse Park

- 3201 Reducing Gait Speed and Improving Balance in an Individual With Parkinson's Disease and Bilateral Deep Brain Stimulation**
Gosselin H, Foster H, Spigel P, Demark L
Heather Gosselin
- 3202 Test-Retest Reliability and Minimal Detectable Change for Measures of Gait and Balance in Adults With Cerebral Palsy**
Levin I, Lewek M, Giuliani CA, Faldowski RA, Thorpe DE
Ilana Levin*
- 3203 The Effects on Balance and Gait in the Advanced Elderly Following Aerobic Training on the Alter-G Treadmill**
Brewer JF, Harris R, Hamilton J, Vause J, Villarreal A
Jacob Brewer
- 3204 Relevance of Each Item on the Activities-Specific Balance Confidence Scale to Adults Living in Urban Environments**
Gurley JM, Hujsak BD, Battista D, Gonsalves-Sabola E, Tam S
James Gurley
- 3205 Locomotor Training in the Rehabilitation of a Patient With Paraplegia After West Nile Virus Infection: A Case Study**
Unger J, Jervis Rademeyer H, Furlan JC, Pujol C, Dawe J, Musselman KE
Janelle Unger
- 3206 Relationship of Functional Reach Test Scores to Falls in Special Olympics Athletes**
Thomas J, O'Neal S, Varnado KE
Jodi Thomas
- 3207 Minimal Detectable Change for Gait Initiation in Individuals With Parkinson's Disease**
Gann K, Nkwocha G, Papa EV
Evan Papa

3208 Using the Tinetti to Predict Falls in Older Adults: A 12-Month Prospective Study

Skornyakov E, Cleary KK

Kimberly Cleary

3209 Visually Induced Fall Prompts a Greater Center of Pressure Shift in Older Adults as Compared to Young Adults During Walking: Preliminary Study

Ma L, Reimann H, Fettes T, Thompson ED, Jeka J

Lei Ma

3210 Does Task-Evoked Pupillary Response Reflect Change in Postural Control? A Proof-of-Concept Study

Kahya M, Akinwuntan A, Williams K, Devos H

Melike Kahya

3211 The Effects of Recruitment of Jaw Musculature on Dynamic Postural Control

Taylor M, Chung T, De Lima R, Mitterling A, Ugharadar N, Woitte JL

Melissa Taylor

3212 Measuring Limits of Stability: Evidence of Concurrent and Construct Validity Between the Protokinetics Zeno Walkway and the Bertec Force Plate

Berg-Poppe PJ, Tao H, Sternhagen J, Johnson C, Cesar GM

Patti Berg-Poppe

3213 Computerized Dynamic Posturography Comparing the Bertec Balance Advantage™ and NeuroCom Smart Balance Master® in Assessing Postural Stability in Healthy Adults

Trueblood PR, Bentley C, Rivera MJ, Wubenhorst N

Peggy Trueblood*

3214 How Do You Rehabilitate Balance When Vision, Sensation, and Vestibular Systems Are Impaired? A Case Study

Reoli R, Wood JM

Rachel Reoli

3215 Awareness, Attitudes, and Beliefs About Fall Risk and Evidence-Based Falls Prevention Programs Among Community-Dwelling Older Adults

Kiami SR, Sky R

Sheri Kiami

3216 Accuracy of Bedside Examination for Balance Impairments: Finding the Best Screening Assessments as an Alternative to Berg Balance Scale

Xia Y, Thompson R, Bhatti DE, Hellman A, McKune J, Suing K, Schmaderer L, Torres-Russotto D, Siu K

Yiwen Xia

3217 Determining the Validity of the “4 Meter Walk Test” iOS Application in Measuring Comfortable and Fast Gait Speed

Fell DW, Wall JC, Allen S, Corley J, Jeziorski H, Whitted S

Dennis Fell

Neurology: Stroke SIG

3218 Validating Smart Phone Applications to Measure Control of Volitional Movement in Patients Following Cerebrovascular Pathology

Fell DW, Dale RB, Saale B, Girardeau S, Nix G, Roddam S, Salisbury L

Dennis Fell

3219 Factors Associated With Healthcare Utilization After Stroke—A Population-Based Study

Obembe A, Shakakibara B, Simpson LA, Eng J

Adebimpe Obembe

3220 Inter-rater Reliability of Shear Wave Ultrasound Elastography in the Biceps Brachii Muscle of Individuals With Chronic Stroke

Paramadilok AE, Newman NA, Ogden KN, Stortini NR, Urbaniak J, Gurari N, Lee S, Ellis MD

Ake Paramadilok

3221 Improved Gait and Balance After Speed-Dependent Locomotor Training in an Adult With Chronic Stroke, Human Immunodeficiency Virus, and Neurosyphilis

Dineen S, Cook A, Freund J

Alys Cook

- 3222** **Combination of Visual Scanning Training and Limb Activation to Improve Left Visuospatial Neglect Following Acute Stroke: A Case Report**
Corcoran A, Studer-Byrnes R
Alyssa Corcoran
- 3223** **Correcting the Imbalance Between Self-Efficacy and Functional and Participation Deficits With Balance-Based Torso Weighting for a Patient Post Cerebrovascular Accident**
Penn J, Cantú RR, Crocker AF
Amy Crocker
- 3224** **Increasing Access to Cost-Effective Home-Based Robotic Telerehabilitation for Stroke Survivors**
Butler A, Housley SN, Garlow A, Thomas T, Ducote K, Howard AL, Wu D, Richards KM
Andrew Butler
- 3225** **Clinically Significant Improvements in Community-Level Ambulation Using Task-Specific Training Vs Alternative Rehabilitation Methods in Adults Post-Stroke**
Resnick A, Desa A, Bowers T, Tetreault L, Clarke B, Sandelli G, Zara C, Loeshelle J
Arielle Resnick
- 3226** **Impact of External Vs Internal Focus of Attention Strategies on Seated Lateral Excursion Measures in Adults With Chronic Stroke and Healthy Adults**
Hyatt A, McPherson SL, Franco VI, Bowen HD, Foil RJ, Kao EN, Linton TA
Ashley Hyatt
- 3227** **The Application of Shaping Techniques With Lower Extremity Exercises for Community-Dwelling Adults With Chronic Stroke: A Feasibility Study**
Gustafson B, Combs-Miller SA, Moore ES, Kelly SP
Beth Gustafson

- 3228 Cognitive Reserve and Clinical Implications for Physical Therapy for Individuals Post Stroke: A Pilot Study**
Ligotski B, Packel L, Roos M, Thielman G, Moelter S
Brianna Ligotski
- 3229 Virtual Reality Treadmill Training for Improving Balance and Gait in Individuals With Chronic Stroke: A Systematic Review**
Kernoschak C, Miceli M, Morabito A, Wheeler C, Moriello G, Simpson B
Cara Kernoschak
- 3230 The Post Stroke Upper Limb Recovery Effort Survey (IMPETUS)**
Sullivan JE, Carmona C, Drogos J, McNutt K, Minton J, Rockert A, Steele M, Taylor E, Webb K, Yao J
Carolina Carmona
- 3231 Corticospinal Drive to the Plantarflexors Predicts Capacity for Walking Function Post-Stroke**
Patten C, Little VL, Banks CL, McGuirk TE
Carolynn Patten*
- 3232 Error Augmentation Training as an Intervention for Walking in Individuals With Chronic Stroke: A Systematic Review of Literature**
Doyle K, Gasper K, Hughes Kinek CM, Nelson K, Nettles B, Tyrell CM
Catherine Hughes Kinek
- 3233 High Repetition and Dose-Specific Training to Improve Function in Community-Dwelling Adult After Stroke**
Yee C, Tomlinson SS
Christina Yee
- 3234 Lower Limb Kinematics Following Gait Rehabilitation: Knee Hyperextension Associated With Gains in Hip Extension in Adults Post-Stroke**
Conroy C, Vistamehr A, Demark L, Rose DK, Fox EJ
Christy Conroy

- 3235 Music-Supported Therapy Enhances Upper Extremity Recovery of Function Following Stroke: A Systematic Review**
Bassile CC, Mavrommatakis Y, Panjaki S, See A
Clare Bassile*
- 3236 Differentiation of Discharge Destination in a Stroke Population Using the AM-PAC "6-Clicks" Basic Mobility Short Forms Post Acute Hospitalization**
Bassile CC, Pfeiffer JS, Rao AK, Donaldson A, Kim S, Casertano LO
Clare Bassile*
- 3237 The Effectiveness of Wii™-Based Therapy With Improving Balance and Activities of Daily Living Function in Patients Post-Cerebral Vascular Accident: A Systematic Review**
Metzger K, Walker C, Barker S, Dittmer JC, Hurley S
Corinne Walker
- 3238 Does Sand-Assisted Locomotor Training Improve Gait Symmetry?**
Hoke D, Aponte R, Dolley J, Simari L, Handzic I, Reed K, Kim S
David Hoke
- 3239 Early Mobility Training With a Bariatric Patient Post Stroke: Where Do I Start, and How Do I Get There?**
Hogue D
Deborah Hogue
- 3240 Backward Walking Training to Target Forward Walking Speed, Dynamic Balance, and Balance Confidence Post-Stroke: A Case Series Report**
Rose DK, Demark L, Patten C, Vistamehr A, Fox EJ, Conroy C, Howarth J, Clark DJ
Dorian Rose*
- 3241 Locomotor Adaptation to a Unilateral Ankle Weight in Persons Post-Stroke: A Pilot Study**
Savin DN, Lopes Gama G, Hughes L, McCombe Waller S, Whitall J
Douglas Savin

3242 Soleus H-Reflex Adaptations Following Upslope and Downslope Walking in Individuals Post-Stroke

Liang J, Akoopie E, Conway Kleven B, Koch TG, Lee Y
Eric Akoopie

3243 High-Level Mobility Training to Foster Effective and Efficient Functional Recovery Following an Acute Stroke: A Case Study

Gallo E
Estelle Gallo

3244 Test-Retest Reliability of Gait Speed in People Post Stroke Who Require Physical Assistance and Assistive Devices to Walk

Fulk G, Olds KC, He Y
George Fulk

3245 Post-Stroke Interhemispheric Cortical Connectivity During Active Motor States of the Paretic and Nonparetic Upper Extremity

Palmer JA, Wheaton LA, Borich MR
Jacqueline Palmer*

3246 The Effects of a Kinetic Lower Extremity Orthosis on Locomotor Function in Individuals With Hemiparesis

Lynskey J, Knilans J, Molzen E, Chapman C, Cocciardi A, Collins K, Dunnington T, Hicks Staffa A, Hicks S, Higgins K, Kelsey A, Yamamoto A
James Lynskey

3247 The Efficacy of Treadmill Training on Balance Dysfunction in Individuals With Chronic Stroke: A Systematic Review

Tally Z, Boetefuer L, Kauk C, Perez G, Schrand L, Hoder JM
Jeffrey Hoder

3248 Upper Extremity End Effector Robot Therapy Compared to Conventional Therapy at the Subacute Stage Post-Stroke

Blackwood J, Lentz A, Roach C, Cruikshank R, States R
Jena Blackwood

3249 Photovoice and Videovoice: The Art of Communicating User Preferences for Solid Ankle-Foot Orthosis Post Stroke

Brown JV

Jennifaye Brown

3250 Mobilization of Patients in Aneurysmal Subarachnoid Hemorrhage Vasospasm Using an Early Mobilization Physical Therapy Algorithm: A Retrospective Study

Ramos J, Hallett EM, Durling RM, Lee J, Printz CD

Jennifer Ramos

3251 Timed Up and Go Performance Moderates the Relationship Between Trailing Limb Angle and Walking Speed in Stroke Survivors

Galgiani JE, Pohlig R, Morton SM, Alcantara CC, Hsiao H, Higginson J

Jessica Galgiani*

3252 In Adults With Chronic Stroke, Is Action Observation With Intent to Practice More Effective Than Training With Non-meaningful Visual Feedback to Improve Upper Extremity Function?

Antonucci LM, Mendoza JT, Salberg L, Skwara F, Streifer M, Tao G, Wong L, Patel J

Jigna Patel

3253 Post-acute Rehabilitation Outcomes After Stroke: A Comparison With Traumatic Brain Injury

Mitchell K, O'Dell K, Rodriguez L, Ruhe M, Seale J, Veramonti T, Wiggs L

Jill Seale

3254 The Impact of a Motivational Task on Motor Learning During Reactive Balance in an Individual With Cerebellar Deficits: A Case Report

Hoover K, Delyser J, Mowder-Tinney J, Towle D

JJ Mowder-Tinney

3255 Functional Dorsiflexion Range of Motion Measurements in Individuals After CVA: A Pilot Study

Cormack J, DeMars K, Cerny K, Wynne M, Soued C

Jody Cormack

- 3256 The Standardization of Outcome Measures as Part of a Clinical Pathway for Patients Poststroke in the Outpatient Setting**
Wood J, Koch J
Jonathan Wood
- 3257 The Overlap Between Perceptions of Cardiovascular Demand and Task Difficulty in Individuals With Chronic Stroke Performing Moderate Intensity Exercise**
Wood J, Reisman D, Drake MP, Morton SM
Jonathan Wood
- 3258 Assessing the Influence of Cognitive Training and Physical Exercise on Mechanisms of Plasticity and Static Balance in Individuals Post-Stroke**
Aldraiwiesh S, Rice J, Gomes-Osman J
Joyce Gomes-Osman
- 3259 Balance and Verticality Training in a Patient Following an Acute Anterior Inferior Cerebellar Artery Stroke**
Sigler J, Eikenberry M
Julie Sigler
- 3260 Clinically Assessed Motor Impairment Predicts Torque Matching Impairment in Chronic Stroke Population**
Drogos J, Van Der Helm NA, Dewald JP, Gurari N
Justin Drogos
- 3261 Exoskeleton Gait Training for Left Middle Cerebral Artery Infarct in Patient Supported With Left Ventricular Assistive Device: A Single Case Study**
Patterson KB, Trammell MK
Kara Patterson
- 3262 High Level Mobility Training Is Safe and Feasible in a Patient With a Recently Placed Left Ventricular Assist Device and a Subsequent Stroke in an Outpatient Neurological Setting**
Connors K

Katie Ann Connors

3263 A Retrospective Analysis for Preliminary Identification of Fall Risk Factors in the Stroke Population at a Community-Owned Healthcare System

DeLave KA, Kadivar Z, Miller A, Lyon MF

Kelsey DeLave

3264 In Patients Post Stroke, Does Body Weight Supported Treadmill Training Result in Increased Walking Ability Compared to Overground Walking Training? A Systematic Review

Jones K, Shane E, Behrens B, Ernst B, McNeal B

Kevin Jones

3265 The Physical Therapy Use of Serial Casting to Gain Range of Motion and Retrain Function

Wing K, Gatewood KK

Kim Gatewood

3266 Monitoring Exercise-Induced Ectopic Beat Frequency Using High Resolution Wearable Sensing: A Safety Study During High Intensity Gait Training (HIIT) in Individuals With Stroke

Hohl K, Jayaraman C, Mummidisetty K, Kaur S, Ledeaux N, Jayaraman A

Kristen Hohl

3268 The Use of Laser Guided Visual Feedback for Improving Lower Extremity Motor Performance in an Individual With Chronic Stroke

Jackson K, Reissman M, Lausin G, Marchant V, Westover J, Nowacki K, Schepers L

Kurt Jackson

3269 Application of a Novel Force-Field to Influence Post-stroke Gait Stabilization Strategy

Maynard K, Bowman M, Dean JC

Kyle Maynard

3270 Lateral Step Treadmill Training for Paretic Limb Step Initiation in Chronic Stroke Survivors

Axelrod J, Hamel A, Hoelterhoff C, Risetter L, Silverman LM, Sykes CJ, Hedman LD, Martinez KM

Lois Hedman

3271 A Case Report of Lateral Step Treadmill Training in Chronic Stroke

Sykes CJ, Hedman LD, Martinez KM

Lois Hedman

3272 Initial Construct Validity of the 3-Meter Backward Walk Test in Individuals With Chronic Stroke

DeMark L, Fox EJ, Conroy C, Vistamehr A, Rose DK

Lou DeMark

3274 The Relationship Between BDNF Val66Met Polymorphism and Functional Recovery in Chronic Stroke Survivors

French MA, Morton SM, Pohlig R, Reisman D

Margaret French*

3275 Impact of Fatigue on Dual-Task Functioning in People With Stroke and Healthy Older Adults

Roos M, McVey C, Clark A, Murphy H, Vo T, Capers D, Regan L, Shvedov E

Margie Roos

3276 Use of Stroke EDGE Recommendations to Predict Fallers in an Acute Inpatient Rehabilitation Unit

Eikenberry M, Kinney C, Zhang N

Megan Eikenberry

3277 The Effects of Activity Tracker Feedback on Walking Activity—A Mixed Methods Pilot Study

Sauer M, Szot L, McKinney M, Norris L, Hale J

Michelle Sauer

3278 Cutting Cucumbers and Riding Bikes: The Impact of Participant-Selected Activities on Psychosocial and Mobility Outcomes

Watkins MK, Hayes HA

Molly Watkins

- 3279 Functional Measurement Post-Stroke Via Mobile Technology**
True H, Fell N, Harris A, Cho J, Hu Z, Sartipi M
Nancy Fell
- 3280 Functional Outcomes of a Patient Post-Stroke With LVAD Following Intensive Inpatient Rehabilitation: A Case Study**
Studer-Byrnes R, McGovern CL, Smith BK
Rachelle Studer-Byrnes
- 3281 Estimated Clinically Meaningful Improvement in Arm Motor Ability Test Scores for Individuals With Stroke**
Martin RA, Fulk G, Page SJ
Rebecca Martin
- 3282 Single Session of 5Hz rTMS Applied to Left DLPFC Improved Dual-Task Walking in Chronic Stroke: A Preliminary Report**
Vanasse RL, Palm K, Nyangani I, Newton A, Walker-Batson D, Goh H
Renee Vanasse
- 3283 Paretic Hip Muscle Activation During Mid Step**
López-Rosado R, Coombes K, Dragunas AC, Fredricks D
Roberto López-Rosado
- 3284 The Lawton Scale as a Predictor of Discharge Destination in Patients With Stroke Undergoing Rehabilitation**
Abdulaziz S, Landgraff N, Marchetti GF, Skidmore E, Sparto PJ, Whitney SL
Sahar Abdulaziz
- 3285 The Recommended Treadmill Training Parameters for Chronic Stroke Patients: A Systematic Review**
Obaidat SM, Oligbo MN, Liu W
Sakher Obaidat
- 3286 Personalizing Upper Extremity Motor Interventions Using Enhanced Probabilistic Neural Networks**
Hulbert George S, Rafiei MH, Gauthier LV, Borstad A, Buford J, Adeli H

Sarah Hulbert George

- 3287 Task-Dependent Changes in Contralesional Motor Cortical Excitability After Stroke**
Kantak SS
Shailesh Kantak
- 3288 Acute Effects of Interval Training Vs Continuous Training on Post-Stroke Locomotor Outcomes**
Aaron SE, Gregory C
Stacey Aaron
- 3289 Increased Prefrontal Cortical Activity During Typical Walking Is Associated With Greater Dual-Task Costs After Stroke**
Chatterjee SA, Albert CM, Fox EJ, Daly JJ, Rose DK, Christou EA, Hawkins KA, Otzel DM, Butera KA, Clark DJ
Sudeshna Chatterjee
- 3290 The Effects of a Combined Intervention of Aerobic Exercise and Upper Extremity Repetitive Task Practice on Quality of Life and Mood in Individuals With Chronic Stroke**
Linder S, Rosenfeldt AB, Davidson S, Zimmerman NM, Alberts J
Susan Linder
- 3291 Within-Session and Between-Session Reliability of Cortical Hotspots Using Motor-Evoked Potentials and Normalized Latencies**
Wonsetler EC, Lynch AM, Czaus SL, Bowden MG
Sydney Czaus
- 3292 Real-Time Biofeedback Training Improves Gait and Clinical Measures Following 8 Weeks of Gait Training in Post Stroke Individuals**
Krishnan V
Vennila Krishnan
- 3294 Effects of Visual Feedback on Muscle Recruitment and Retention of Force Production During Recumbent Stepping in Individuals With Stroke**

Pardo VM, Caldwell J, DeAngelo S, Rohkohl A, Swadling AM, Galen S
Victoria Pardo

3295 Virtual Reality Rehabilitation System With Gesture Recognition Technology for Unilateral Spatial Neglect in Subacute Stroke Patients

Choi H, Shin W, Bang D
Won-Seob Shin

3296 A Bout of Acute High-Intensity Exercise Alters Corticomotor Excitability Post-Stroke

Li X, Charalambous CC, Morton SM, Reisman D
Xin Li

3297 The Effect of Extra Functional Electrical Stimulation Cycling Practice Using Bandwidth Feedback on Length of Stay and Fall Risk in Acute Stroke Survivors Receiving Inpatient Rehabilitation

Crump ZC, Lyons AM, Carroll P, Shuping L, Pidcoe P
Zachary Crump

Orthopaedics: Elbow/Wrist/Hand

3298 Effectiveness of Trigger Point Dry Needling for Lateral Epicondylitis Versus Lateral Epicondylitis: A Report Comparing Two Cases

Hodge A
April Hodge

3299 Prognostic Factors for the Poor Pain and Upper Extremity Functional Outcomes After Distal Radius Fracture: A Systematic Review

Alain GN, Molnar CL, Moyer TS, Mehta S
Gabriel Alain

3300 Identification of a Facilitated Segment in a Patient With Elbow Pain After Arthroscopic Rotator Cuff Repair: A Case Report

Zych JA, Beneciuk J
Justin Zych

3301 Management of Distal Radius Fracture by Certified Hand Therapists: A Qualitative Study

Beasley K, Bowyer AR, Londino OR, Mehta S
Karli Beasley

- 3302 The Importance of Physical Therapy During the Healing Process of a Triangular Fibrocartilage Complex Tear With Suspected Nondisplaced Fractures of Triquetral and Capitate Bones**

Macaraeg M, Hull A, Cheung A
Marlou Macaraeg

- 3303 Testing Position Variability With Upper Extremity Neurodynamic Tests**

Friberg RJ, Gee K, Harper S, Schimpf M, Heald C
Robert Friberg

- 3304 Manual Therapy and Activity Modification for Management of Bilateral Lateral Epicondylopathy: A Direct Access Case Report**

Buck T, Beneciuk J, Rowe R
Tava Buck

- 3305 Beliefs About Risk Factors and Prevention of Upper Extremity Injuries in Recreational Rock Climbers: A Descriptive Study**

Orlowski V, Jain TK
Victoria Orlowski

Orthopaedics: Pain Management

- 3306 Physical Therapy Management of a Patient With Neuropathic Ocular Pain Symptoms—A Case Report**

Miller CA, Wong M
Chelsea Miller

- 3307 A Preliminary Investigation of Clinical Records in Populations of Whiplash and Fibromyalgia: Potential Clinical Implications of Big Data Analytics**

Floyd S, Gargiulo K, Kim CD, Pyles K, Chang AH, Nilles H, Van Der Laan KF, Elliott JM
Chul Jong Kim

- 3308 Manipulation and Exercise for Treatment of Chronic Migraine as an Alternative Intervention for Patients Previously Prescribed Opioid Analgesics—A Case Series**
Kujawa D
David Kujawa
- 3309 How the Use of a Therapeutic Mobile or Internet-Based Applications Affects the Management of Chronic Pain: A Systematic Literature Review**
Slabinski E, Gehring K, Ponce M, Braman J, Bianchi NA, Ouellette-Morton R, Escorpizo RS
Emily Slabinski
- 3310 Implementation of a Pain Symptom Classification Algorithm to Facilitate the Development of Diagnostic Reasoning Strategies in Physical Therapy Students and Orthopedic Physical Therapy Residents**
McGaugh JM, Ferguson MD
Janna McGaugh
- 3311 Initial Experience With a Novel Approach to Treatment of Chronic Pain in Survivors of Trauma**
Dee J, Klotz SR, Matos V, Nason J, Ninh C, Oziemina J
Justine Dee
- 3312 The Effectiveness of Kinesiotaping for Decreasing Pain in the Cervical Region: A Systematic Review**
Moran KA, Bradley K, Danoski M, Raab J, Goodall A, Evans C
Kelley Moran
- 3313 Physical Therapist Led Care Coordination: A Biopsychosocial Approach to Chronic Low Back Pain Management in the Clinically Complex Patient**
Spiker LM, Walston ZE, Yake DM
Lisa Spiker
- 3315 Patients' Thoughts and Perspectives on Pain in an Outpatient Physical Therapy Practice: A Descriptive Study**
Adriance N, Kareha S, Bergmooser AB, Bays JN, Stoltzfus J
Nicholas Adriance

- 3316** **People Living With Back Pain Receiving Guideline-Based Physical Therapy Care Integrated With the Stanford Chronic Pain Self-Management Program: Effectiveness on Disability and Pain Interference**
Karayannis NV
Nicholas Karayannis
- 3317** **The Role of Physical Therapy in Addressing the Opioid Epidemic: Getting to the Source of the Pain!**
Andrews R, Lathrop D
Rebecca Andrews
- 3318** **Mirror Visual Feedback Therapy for Treatment of Phantom Limb Pain: A Clinical Practice Guideline**
Allen RJ, Moon ET, Hoskins GB
Roger Allen
- 3319** **The Successful Treatment of Complex Regional Pain Syndrome With Pain Education and Physical Therapy**
Kleinstein S
Sarah Kleinstein
- 3320** **Self-Applied Vs Clinician-Applied Treatment for Myofascial Trigger Points**
Miller SE, Lee J, Goodwin C, Greene JC, Siyufy A, Aron A
Sarah Miller
- 3321** **Co-occurrence of the McKenzie Mechanical Syndromes and Central Sensitization a Descriptive Study of Chronic Neck Pain Patients**
Tousignant-LaFlamme Y, Lam OT, Dumas J, Simon CB
Yannick Tousignant-LaFlamme
- 3322** **Utilization of Manual Therapy to the Lumbar Spine for Individuals With Bilateral Lower Extremity CRPS: A Case Series**
Hernandez L, Walston ZE, Yake DM
Zachary Walston

Orthopaedics: Shoulder

- 3323 Repeated End-Range Cervical Motions to Restore Shoulder Function in a Patient During Late-Phase Rotator Cuff Repair Rehabilitation: A Case Report**
Bronstein AJ
Allan Bronstein
- 3324 Effects of Gyroscopic Training on Scapulothoracic Functional Stability and Upper Extremity Power**
Wilson A, Mann A, Minick K, Herman L, Bringman D, Mincer A
Ally Wilson
- 3325 Dry Needling and Eccentric Exercise for the Treatment of Patients With Chronic Bicipital Tendinopathy: A Case Series**
McDevitt AW, Snodgrass SJ, Cleland J, Krause LA, Leibold MR, Borg M, Mintken PE
Mary Rebecca Leibold
- 3326 Relationship Between Isometric Muscle Strength of Shoulder Rotators With Range of Motion and Retroversion of the Humeral Head Pitchers in Athletes**
Basta A, Petrucci C, Da Silva JM, Feitosa CB, Lemos J, Freitas DG
Andreia Basta
- 3327 Measurement Properties of the Shoulder Pain and Disability Index: A Systematic Review**
Mason AN, Park C, Leslie R, Roberts R, Mehta S
Ashley Mason
- 3328 Influence of Opioid Use and Referral Source on Physical Therapy Treatment Patterns and Outcomes for Patients With Shoulder or Knee Pain**
Dunn D, Markut KA, Lutz A, Denninger TR, Shanley E, Thigpen CA
Charles Thigpen
- 3329 Lower Extremity Exercise Impacts Shoulder Pain**
Wassinger CA, Lumpkins L
Craig Wassinger

- 3330 Corticosteroid Injections Performed by a Physical Therapist: A Review of Five Clinical Cases**
Watson D, Young BA
Daniel Watson
- 3331 The Effects of Differing Biofeedback Methods on EMG Ratio During Scapular Plane Humeral Elevation**
Loken D, Martin B, Mason L, Lauer B, Legon W
David Loken
- 3332 The Effectiveness of Physical Therapy Interventions Targeting the Shoulder Girdle in Adults With Shoulder Pain: A Systematic Review**
Schilling D, Bott L, Brancato C, Kelly G, Zinsman A
David Schilling
- 3333 The Effect of Electrical Stimulation Cueing and Exercise on Scapular Position in a Patient With Scapular Dyskinesis and Shoulder Pain: A Case Study**
Walker DL, Hickey CJ
Deborah Walker
- 3334 Risk Factors Associated With Sleep Disturbance in Patients With Adhesive Capsulitis**
Mulligan EP
Edward Mulligan
- 3335 There Is No Difference Between Eccentric and Concentric Strengthening Exercise in the Treatment of Rotator Cuff Tendinopathy: A Systematic Literature Review**
Osorio V, Pitkin M, Sackett E, Slayton E, Sargent E, Henry SM, Bianchi NA, Escorpizo RS
Margaret Pitkin
- 3336 Kinesiotaping Increases the Acromiohumeral Distance in Individuals With Symptomatic Rotator Cuff Tendinopathy**
de Oliveira FC, Pairo de Fontenay B, Bouyer LJ, Roy J

Fabio De Oliveira

- 3337 Glenohumeral Joint Instability: Stabilization Training for a Patient With Ehlers-Danlos Syndrome (Hypermobility Type)**
Corder G, Bowman P, Walter M, Conroy V
Gabriel Corder
- 3338 Predictors of Injury for Baseball Pitchers High School Level and Above**
Thompson JA, Atwood D, Creel M, Poche S
Jeffrey Thompson
- 3339 Creeping Phenomenon Observed During Anteroposterior Glide Mobilization of the Glenohumeral Joint in Patients With Adhesive Capsulitis**
Hsu A, Fujia J, Tsai M
Jiao Fujia
- 3340 Fatigue-Associated Changes in Scapular Control and Serratus Anterior**
Day JM, Dale RB, Dowling J, Wyatt P, Papich H
Joseph Day
- 3341 Reliability of the Laser-Pointer Assisted Angle Reproduction Test in Healthy Volunteers**
Beebe J, Dindorf A, Parsons O, Roy T
Justin Beebe*
- 3343 Relationships Between Intramuscular Fat Infiltration and Pain and Function in Patients With Rotator Cuff Disease: A Preliminary Investigation**
Shaughnessy K, Mendoza R, Kurtz A, Besch B, Zaremba AE, Kummerer MM, Seitz AL
Kathleen Shaughnessy
- 3344 Relationship Between Shoulder Activity Level and Pectoralis Minor Muscle Length**
Gerrity K, Goodstadt N, Ebaugh D
Kelly Gerrity

- 3345 The Effect of Proprioceptive Neuromuscular Facilitation on Pain, ROM, and Function in Orthopedic Shoulder Pathologies: A Systematic Review**
Kruchowsky K, Balzer D, Burbach A, Frank D, Learch D
Kimberly Kruchowsky
- 3346 Clinician Expectations of Full Thickness Rotator Cuff Repair Outcomes**
Laning SG, Linde A, Rooks A, Schwaegerle K, Escorpizo RS, Michener LA, Failla M
Kristen Schwaegerle
- 3347 Treatment of Shoulder Pathologies Based on Irritability: A Case Series**
Somerville K, Walston ZE, Yake DM
Kristin Somerville
- 3348 Acute and Long-Term Changes in Acromiohumeral Distance (AHD) Following a Fatigue Protocol (FP) and a Six-Week Exercise Program**
Shah KM, Casey A, Hoerst J, Johnson D, Kelly S, Smith NT, McClure PW
Kshamata Shah
- 3349 Reliability and Face Validity of a Novel Mobile Device Application for Three-Dimensional Scapular Angle Measurements**
Staker JL, Cloud B, DesHotels L, De Werd N, Eipperle B, Ludewig PM
Laura DesHotels
- 3350 Effects of Aging and Position on Load-Displacement Relation of the Glenohumeral Joint in Association With Anteroposterior Glide Movement**
Tsai M, Hsu A
Meng-Shiuan Tsai
- 3351 Exercise Therapy in the Conservative Treatment of Full Thickness Rotator Cuff Tears: A Systematic Review**
Jeanfavre M, Husted S, Leff G
Michael Jeanfavre

- 3352 The Short Term Effect of Elastic Therapeutic Taping Using Rocktape and an Exercise Program on Scapular Alignment in Individuals With Rounded Shoulder Posture: A Pilot Study**
Pathare N, Masi R, Flexler H
Neeti Pathare
- 3353 Low Load Long Duration Static Stretch During Preadhesive (Pre-freezing) Phase of Adhesive Capsulitis**
Gagne PJ
Paul Gagne
- 3355 Reliability of a 10-Item Shoulder Strength-Testing Protocol Using Hand-held Dynamometer**
McMenamin PJ, Walden-Morden A, Lyon J, Cropes M, Bellucci K
Peter McMenamin
- 3356 Reliability of a New Frontal Plane Trapezius Manual Muscle Test**
Unanue Rose RA, Henderson L, Schwent N, Hawthorne A, Morris R
Rachel Unanue Rose
- 3357 Kinesiotape® Has No Effect on Shoulder Proprioception, Movement Control, or Strength When Using Robotic Assessment**
Culbertson R, Arnot C, Fitz-Maurice S, Handlery K, Johnson A, Malcom J, Fritz SL, Herter TM, Liuzzo DM, Mathews HW
Robyn Culbertson
- 3358 Rehabilitation of a 54-Year-Old Female Construction Worker Following a Sternoclavicular Joint Reconstruction Five Years Post Injury: A Case Report**
Brokenshaw J, Miller SG, Lucero MM, Golowic M
Samantha Miller
- 3359 In Pectoralis Major Tear, What Is the Critical Finding(s) Determining Surgical Vs Non-surgical Intervention: A Systematic Review With Critical Synthesis of the Literature**
Cook BW, Korth TB, Larson J, Massey H, Michael L, Sneed T

Tom Sneed

3360 Electromyography Analysis of Shoulder Girdle Muscles During Cardinal Plane Arm Elevation at Different Body Positions

Bush TA, Bogdanove AG, Goerdt CV, Stapleton D, Vardaxis V

Traci Bush

3361 Surgical Interventions for Post-Traumatic Anterior Shoulder Instability: Preliminary Results From a Cochrane Systematic Review

DesJardins-Charbonneau A, Lowry V, Roy J, Vendittoli P, Rouleau DM, Desmeules F

Veronique Lowry

Orthopaedics: Spine

3362 Lumbar Manipulation Plus Exercise for the Treatment of Mechanical Low Back Pain in Adolescents: A Case Series

Walston ZE, Yake DM

Zachary Walston

3363 Thoracic Thrust Manipulation and Exercise for the Treatment of Failed Back Surgery Syndrome: A Case Series

Dorvilus A, Yake DM, Walston ZE

Adler Dorvilus

3364 Clinical Decision Making With an Undiagnosed Cervical Syrinx

Asumbrado A, Hull A, Cheung A, Perry T

Adrienne Stephanie Asumbrado

3365 Psychologically Informed Practice Training Changes Physical Therapists' Attitudes and Beliefs About Chronic Pain

Warshaw A, Holm AK, McCuin T, Henry SM

Alex Warshaw

3366 Surface Electromyography of the Internal and External Oblique Muscles During Isometric Tasks Targeting the Lateral Trunk: Is the Lateral Plank the Best Option?

Kinney AL, Giel MD, Harre BL, Heffner KT, McCullough TS, Savino MA, Scott AR, Barrios J

Allison Kinney

3367 Feedback Needed to Modify Lumbar Movement Patterns During Motor Skill Training: A Preliminary Report

Marich AV, Lanier VM, Lang CE, Sahrman SA, Van Dillen LR

Andrej Marich*

3368 Are Physical Therapists (PT) Low Back Pain Beliefs (LBPB) Driving Treatment Patterns?

Lis AM, Weiner S, Oh C, Palazzo MR, Pagnotta GL, Oswald W

Angela Lis

3369 Use of Manual Therapy Preoperative to Lung Transplantation in Patient With Idiopathic Pulmonary Fibrosis: A Case Report

Jones BM, Barnes A, Bishop K

Beth Jones

3370 Differential Diagnosis in a Patient Referred to Physical Therapy for Neck Pain and Dizziness With Rotation: Role of the Primary Care Physical Therapist

Profitt B, Woolley S, Roach B

Brad Profitt

3371 Lumbar Disc Disease Characteristics in Patients Who Centralize Symptoms

Dionne C

Carol Dionne*

3372 A Quality Assessment of Lumbar Manipulation Techniques on YouTube: A Systematic Review of Video Content

Campbell C, Strauss D, Webster AC, Jain TK

Christopher Campbell

3373 Explanatory Multivariate Modeling for Disability, Pain, and Claims in Patients With Spine Pain Treated in a Direct Access Physical Therapy Model of Care

Green C, Pastore A, Cronley L, Walker MD, Thigpen CA, Givens DL, Cook CE
Christopher Green

- 3374 Recruitment of the Transverse Abdominis During Selected Therapeutic Exercises as Measured by Rehabilitation Ultrasound Imaging**
Wise CH, Kern L, Sharpe T, White T, Yoh K, Zerbe J, Infantolino B
Christopher Wise
- 3375 Comparison of Prescription Opioid and Manual Therapy Use on 1-Year Healthcare Costs in Patients With Spine and Shoulder Pain**
Rhon D, Greenlee T, Fritz J
Daniel Rhon
- 3376 The Effectiveness of Dry Needling Compared to Myofascial Release and Ischemic Pressure in the Treatment of Myofascial Trigger Points Resulting in Cervicogenic Pain: A Systematic Review**
Haydt R, Watto D, Reynolds A, Torres B, Chillo J, Cannon R
Danika Watto
- 3377 Atlantoaxial Instability in a Patient With Neck Pain and Rheumatoid Arthritis**
Bayer E, Elliott R, Bang M, Ross MD
Edmond Bayer
- 3378 The Effects of Manual Compression During the Active Straight Leg Raise as an Indicator of Specific Core Muscle Deficiency**
Euaparadorn E, Garcia RK, Plysyk A, Schubert L, De Los Santos J, Hirsch S, Weill S, Turcic J
Emil Euaparadorn
- 3379 Immediate Effects of Cervical Spine Manipulation on Gait Parameters in Individuals With Neck Pain**
Albano MD, Blok E, Gronert B, Masuda R, Puentedura EJ
Emilio "Louie" Puentedura
- 3380 Non-specific Effects of Manual Therapy: A Mixed-Methods Investigation of Contextual and Social Interactions**

Snyder E, Lester J, Leickel MN, Selvage S, Keser S, Leatherman E, Kost C, Mello R, Lievre A, Wolff-Burke M, Bolton C, Hartstein A, Fergus A
Emily Snyder

3381 Thoracolumbar Junction Syndrome in a Collegiate Baseball Player With Acute Lumbar Disc Herniation: A Case Report

Jankov E
Eric Jankov

3382 Lumbar Repositioning Error Increased With a Repeated Spinal Flexion Task in Asymptomatic Individuals

Liu EK, Myers BJ
Evan Liu

3383 The Effects of Thoracic Spine Thrust Manipulation on Cervical Joint Position Error

Austin GP, Smith K
Gary Austin

3384 An Electromyographic Analysis of Common Thoracic Exercises: Implications for Rehabilitation

Beneck GJ, Dalen (Cornelius) D, Hung J, Rudolph L, Santistevan JA
Jason Hung

3385 The Interrelationship Between Functional Comorbidities and Reported Outcome Measures in Lumbar Rehabilitation: Clinical Implications

Myers H, Sexton J, White C, Ramirez MM, Pepe J, Patel C, Carrigan P
Holly Myers

3386 When in Doubt, Refer It Out: Neurologic Testing and Subsequent Referral in a Patient With UE and LE Complaints With an Undiagnosed Myelopathy and Cervical Lesion

Orr JR, Carroll A, Manal TJ
James Orr

- 3387** **Magnitudes of Muscle Activation of Shoulder Complex and Spine Stabilizers During the Standard Push-Up and Pushing Exercises Using a Suspension Strap Training System**
Youdas JW, Baartman HE, Gahlon BJ, Kohnen TJ, Sparling RJ, Hollman JH
James Youdas
- 3388** **Factors Associated With Booster Visit Prescription in Adults With Low Back Pain**
Civello JM, Francois SJ, Lanier VM, Czuppon S, Degeeter RM, Wallendorf M, Van Dillen LR
Jesse Civello
- 3389** **Use of Neuromuscular Electrical Stimulation to Facilitate Lumbar Multifidus Activation Following a Lumbar Medial Branch Radiofrequency Ablation**
Roberto M, Barry J
John Barry
- 3390** **Demographics, Comorbid Conditions, and Medications Among Adults Seeking Physical Therapy Services for Spine-Related Pain**
Chevan J, Brooks G
Julia Chevan
- 3391** **Managing Non-operative Chiari I Malformation by Reducing Dural Tension**
Blumenthal K, Magel JS, Case R, Gertsch Z, Cohee K
Katey Blumenthal
- 3392** **Manual Therapy Combined With Vestibular Exercises in Treatment of a Patient With Chronic Cervicogenic Dizziness Induced After a Massage**
Drummond K, Wang-Price S, Lucido M
Kathryn Drummond
- 3393** **Management of Concussion With Cervical Spine Impairments: A Case Study**
Cherian KE, Lally M, Cherian N, Alberts J
Kay Cherian

- 3395 The Effects of Anthropometry and Fear of Pain on the Course of Low Back Pain During Prolonged Standing**
Hwang C, Van Dillen LR
Linda Van Dillen*
- 3396 The Use of Pilates-Based Exercise in the Treatment of a 24-Year-Old Patient With Persistent Low Back Pain Following Transforaminal Lumbar Interbody Fusion**
Peterson LA, Haladay DE
Lynn Peterson
- 3397 Accuracy of Diagnostic Triage Decisions for Patients Presenting to Physical Therapists With Primary Complaints of Low Back Pain**
Miller Spoto MA, Opett AJ, Aldi K, Conaty L, Small A, Somes J, Storms D
Marcia Miller Spoto
- 3398 The Effects of Back School on Pain and Disability in Patients With Low Back Pain: A Systematic Review**
Cox T, Dubbe M, Paffile B, Tekeste Y, Thompson Z, Watson D
Matt Dubbe
- 3399 Successful Management of an Individual With Persistent Headaches After Concussion Using a Multimodal Approach: A Case Report**
Pugliese MS
Matthew Pugliese
- 3400 Rapidly Increasing Incidence in Scoliosis Surgery Over 14 Years in a Nationwide Sample**
Iversen M, Von Heideken J, Gerdhem P
Maura Iversen*
- 3401 Manual Physical Therapy and Cervical Joint Position Training for Cervicogenic Dizziness Following Whiplash-Associated Disorder: A Case Report**
Friedman M, Smith K
Melanie Friedman

- 3402** **The Effects of Direct Access Physical Therapy With Guideline Adherent Care Vs Traditional Access Through Physician Referral on Cost Utilization and Outcome of Care in Cervical Spine Radiculopathy: A Case Report**
Ramirez MM
Michelle Ramirez
- 3403** **Effects of Lumbopelvic Manipulation on Neuromuscular Activity of Back and Hip Muscles in Adults With Chronic Back Pain**
Almadan M, Wang-Price S, Ortiz A, Brizzolara KJ
Mohammad Almadan
- 3404** **Gluteus Medius Strengthening in Chronic Low Back Pain, a Pilot Study**
Cooper N, Sluka K
Nicholas Cooper
- 3405** **The Use of Electrical Dry Needling and Cervical Joint Mobilizations to Treat Cervicogenic Headaches: A Prospective Case Report**
Van Zant RS, Boyd R, Petrosky K
Robert Boyd
- 3406** **Validation of a Screen for Dysfunctional Breathing**
Kiesel K, Blair LG, Brown E, Kocher J, Sizemore S, Thornton R, Rhodes TN, Englert A, Butler R
Ryan Thornton
- 3407** **Exposure to Treatment Affects Treatment Attribute Ratings in Adults With Low Back Pain**
Francois SJ, Marich AV, Roles K, Wallendorf M, Van Dillen LR
Sara Francois
- 3409** **Does Tactile Feedback Increase Lumbar Multifidus Muscle Activation in Asymptomatic Healthy Adults and Patients With Low Back Pain?**
Wang-Price S, Anderson EM, Zafereo J, Brizzolara KJ
Sharon Wang-Price
- 3410** **Quality Assurance: Alignment of Back Pain Treatment With Practice Guidelines**

Weiner S, Lis AM, Oh C, Pagnotta GL, Palazzo MR, Oswald W
Shira Weiner

3411 Modifiable Impairments Identified Years After Surgical Intervention for Arnold Chiari Malformation Respond to Physical Therapy Intervention

Seymour WG, Smith AH, Manal TJ
William Seymour

3412 Hip Abductor Strength in Response to Various Sitting Postures: A Controlled Laboratory Study

Pheasant S, Haydt R, Machi T, Munda J, O'Dell R, Thomas BA, Tiffany C
Steven Pheasant

3413 EMG Analysis of Latissimus Dorsi, Middle Trapezius, and Erector Spinae Muscle Activity During Spinal Rotation

Jeno SH, Mabey R
Susan Jeno

3414 Hip Posterolateral Musculature Strengthening in Patients With Chronic Nonspecific Low Back Pain: Preliminary Results of a Randomized Clinical Trial

Fukuda TY, Aquino LM, Ayres IG, Pereira PG, Apolinario A, Feio A, Carvalho G
Thiago Fukuda

3415 Application of a Motor Skill Training Program in an Individual With Chronic Low Back Pain

Lanier VM, Lang CE, Van Dillen LR
Vanessa Lanier

Acute Care

3417 Physical and Occupational Therapy After Transfemoral tAVR

Myszanski A, Michon B, Ahmed N, Lupcke D, Pedawi N, Wyman J, O'Neil W
Adele Myszenski

- 3418 Traditional Physical Therapy Supplemented With Continuous Passive Motion for an Adolescent With Septic Arthritis Complicated by the Development of Heterotopic Ossification: A Case Report**
Wade A, Lulofs-MacPherson K
Aja Wade
- 3419 Managing Functional Expectations in the Palliative Patient Transitioning to Hospice in Acute Care: A Case Study**
Coyle A
Alison Coyle
- 3420 Early Rehabilitation Improves Function After Minimally Invasive Mitral Valve Repair Using MitralClip: A Case Report**
Lawing A, Loughner K, Nicoletti M, Lopez LD
Allie Lawing
- 3421 Early Mobilization of a Patient With a Biventricular Assist Device and Additional Support Devices: A Retrospective Case Report**
Kras A
Allison Kras
- 3422 Improving Functional Mobility and Quality of Life for Patients With Congestive Heart Failure Beginning in the Acute Care Setting**
Levin AM, Gentry V
Alyssa Levin
- 3423 The Prevalence of Patients With Blood Coagulation Disorders in an Acute Physical Therapy Hospital**
Robinson AJ, Rundquist PJ
Amanda Robinson
- 3424 The Use of a Comprehensive Vestibular Examination in the Acute Care Setting to Identify and Treat Benign Paroxysmal Positional Vertigo in a Patient With Traumatic Brain Injury**
Soto A
Amanda Soto

- 3425 The Effect of a High-Fidelity Simulation Experience on Acute Care Confidence in DPT Students**
Bayliss AJ, Proimos D, Johnson RP, Strunk VA, Altenburger P
Amy Bayliss
- 3426 Provider Satisfaction With Emergency Department Physical Therapy at a Level I Trauma Hospital**
Arthur AJ
April Arthur
- 3427 Progressive Mobility: Evidence-Based Program Improves Outcomes in Critically Ill Patients in the ICU Setting**
Silverman A
Ashley Silverman
- 3428 The Use of Supine Ergometry to Facilitate Conservative Treatment of Ileus in the Critically Ill Patient: A Case Series**
Randolph B, Goldberg L, Sando TA
Brenna Randolph
- 3429 Increasing Value-Focused Behaviors and Quantified Value-Added in Acute Care Physical Therapy Using a Simple Value Calculation**
Hull B, Thut C
Brian Hull
- 3430 The Evaluation and Management of Vestibular Symptoms in a Patient With an Acute Traumatic Brain Injury**
Fitzpatrick B
Brianna Fitzpatrick
- 3431 The Power of Yoga: Clinical Outcomes and Cutaneous Functional Unit Recruitment for a Patient With Cervical and Upper Extremity Burn Scar Contracture**
Dean B, Vocke S, Neely L
Brooke Dean

- 3432** **Would Ischemic Stroke Patients Benefit From Specific Treatment Progression to Avoid Perfusional Symptoms in the Acute Care Setting?**
Hawthorne C, Newkirk M
Caitlyn Hawthorne
- 3433** **A Multidisciplinary Approach to Improve Patient Outcomes in the Stroke Population in the Acute Care Setting**
Haggerty C, Pino W
Carolyn Haggerty
- 3434** **Assessing the Impact of General Anesthesia Versus Spinal Anesthesia on Primary Elective Hip and Knee Replacements: A Longitudinal Study**
Workman C, Ogle KC
Charles Workman
- 3435** **The Role of the Physical Therapist in Managing a Patient With Peripheral Nerve Entrapment: From Emergency Department Early Access to Outpatient Rehabilitation**
Stough CM, Lebec M
Christina Stough
- 3436** **Reliability of an Installed Chair Exit Alarm System for Fall Prevention: A Double-Blind Randomized Controlled Trial**
Li T, Wilson CM, Basal Y
Christopher Wilson
- 3438** **Physical Therapy Utilization in Older Adults Hospitalized for Fall-Related Injury: A Retrospective Chart Review**
Bogard CL, Lanzino D, Hollman JH, Cooper BV, Fischer AL, Glaess SB, Sellman BJ
Connie Bogard
- 3439** **Feasibility of Ambulation for Patients on Heated High-Flow Nasal Cannula Oxygen Therapy in Intensive Care Unit**
Keenan D
Danielle Keenan

- 3440 Physical Therapy Considerations for Patients With Wernicke-Korsakoff Syndrome: A Case Study**
Zisser D
Darra Zisser
- 3441 Inspiratory Muscle Training Combined With Pulmonary Rehabilitation, Dietary Management, and Nighttime Ventilatory Support in an Older Woman With Obesity Hypoventilatory Syndrome: A Case Report**
Mandel D, Cahalin LP
David Mandel
- 3442 Inspiratory Muscle and Functional Performance Limitations in Patients After Orthotopic Liver Transplantation: A Case Series Report**
Mandel D, Cahalin LP, Guzman J, Perez Z, Sykes C
David Mandel
- 3443 Post-operative Functional Outcomes Following Total Hip Arthroplasty Using Three Different Approaches in the Acute Care Setting**
Brennan D, Holland S, Pathare N, Fletcher F
Dawn Brennan
- 3444 Sentinel Events: A Growing Concern in Physical Therapy Practice**
Hall Bibb D
Dawn Hall Bibb
- 3445 Role of Acute Physical Therapy on the Medical Units: Who Are We Seeing and Why?**
Powell D
Debra Powell
- 3446 Early Mobilization of Patients Within 24 Hours of Receiving IV Tissue Plasminogen Activator**
Brown D
Denise Brown
- 3447 The Effectiveness of Early Mobilization for Critically Ill Patients**

Dinorcia D, Chan J, Chan J
Donnajo Dinorcia

- 3448 Liberalization of Sternal Precautions for Patients With Complicating Mobility Challenges**
Wolf E, Alberding K
Elissa Wolf
- 3449 Using Interdisciplinary Team Coordination and Management to Guide Physical Therapy Treatment and Early Mobility for a Critically Ill Patient With Familial Dysautonomia**
Appel E, Soto A
Elizabeth Appel
- 3450 The Role of Physical Therapy in Care Coordination Value-Based Medicare Bundled Payment Programs**
Biehl E, Grundstein M
Elizabeth Biehl
- 3451 Making Early Intervention Mobility a Reality for Patients With Extreme Obesity in the Acute Care Setting: A Case Study**
Lewis EA, Martin K, O'Connor B, Pittrich S, Skoch A
Elizabeth Lewis
- 3452 Appropriate Dosing of Acute Care Physical Therapy Services for Patients Status-Post Hip Open Reduction Internal Fixation After a Trauma or Fall**
Nelson E, Desai B
Elizabeth Nelson
- 3453 Feasibility of Running a Successful Acute Care Therapy Gym in a Tertiary Setting: Role of Physical Therapist Assistant**
Woolford EL, Kumble S
Enjeen Woolford
- 3454 Integration of the Acute Care Competencies to Enhance Doctor of Physical Therapy Student Preparation for Inpatient Settings**
Sawyer EE, Nordon-Craft A

Eric Sawyer

- 3455 The Development and Rewards of Establishing a Safe Patient Handling/Mobility Program**
Widawski G, Schmerzler A, Taipe C
Golda Widawski
- 3456 Mobilization for Persons With Acute Stroke: A Survey of Current Physical Therapy Clinical Practice**
Anderson HD, Biely S, Carr-Epstein C, Dappah-Colon J, Hollenbeck A, Schell H, Sifer A
Heather Anderson
- 3457 Intensive Care Unit Acquired Weakness After Bilateral Ventricular Assistive Device Implantation: A Retrospective Case Study**
Walrath JG, Schwab S, Adachi I, Dreyer W, Schlosser RR, Jacob E, Hannigan L, Elias BA, Goldberg J
James Walrath
- 3458 Early Inclusion of Physical Therapy Home Exercise Programs in Acute Care**
Dumas J, Previte E, Manassis M, Giordano M, Batistick-Aufox H
Jane Dumas
- 3459 Impact of Strength on Physical Performance and Quality of Life in an Outpatient Dialysis Population**
Wetzel J, Giuffre S, Guy R, Sarac E
Jane Wetzel
- 3460 Determining Discharge Recommendations Following Elective Orthopedic Surgery**
Diaz J, Diaz KM, Wells CL
Jason Diaz
- 3461 Use of an Early Mobility Protocol in the Trauma Intensive Care Unit: A Case Report**
Neely L, Diaz J
Jason Diaz

- 3462 The Role of Physical Therapy in Disaster Response: A Scoping Review of the Literature**
Hartman J, Barr K, Martin M, Orvis B, Sarkisian K, Tomanovich Z, O'Dwyer LC
Jeff Hartman
- 3463 Enhanced Recovery Program (ERP) for Total Hip Arthroplasty (THA)**
Brandon JE
Jennifer Brandon
- 3464 Advocating for Early Acute Care Physical Therapy in a Patient With a Severe Traumatic Brain Injury (TBI): A Case Report**
Sampras J
Jenny Sampras
- 3465 The Impact of Acute Care Simulation on Clinical Performance and Competence: Going Beyond Self-Efficacy**
Harper-Hanigan KL, Nguyen JH, Wilson Q
John Nguyen
- 3466 Successful Patient Participation Among Acute Hospital Physical Therapists**
Fertitta J, Kim J, Williams P, Young D
Joseph Fertitta
- 3467 Acute Care Outcome Measures Measuring Function for a 27-Year-Old Male With Medical Complexity and Failure to Thrive: A Case Report**
Roos JM, Terrill J, Zarrinkhameh L
Joseph Terrill
- 3468 Timing of Rehabilitation on Length of Stay and Cost in Patients With Hip or Knee Joint Arthroplasty: A Systematic Review With Meta-analysis**
Kirker KM, Masaracchio M, Hanney WJ, Liu X, Kolber MJ
Kaitlin Kirker

- 3469 A Contemporary Review of Emergency Department (ED) Physical Therapist (PT) Practice and Considerations for Expansion of the EDPT Model**
Mullen K, Lebec M, Stough CM
Kaitlin Mullen
- 3470 The Effectiveness of Cognitive Behavioral Therapy Techniques in Physical Therapy for a Patient With a Chronic Spinal Cord Injury After an Elective Spinal Fusion**
Lester H, Okuda K
Keiko Okuda
- 3471 Promoting a Culture of Mobility in the Hospital Using a Progressive Activity and Mobility Plan (PAMP)**
McGarry KA
Kimberly McGarry
- 3472 Gravity-Facilitated Weight-Bearing in an Upright Tilting Hospital Bed Elicits Minimal Muscle Activity in Healthy Individuals**
Mayer KP, Uhl TL, Dupont-Versteegden EE, Morris PE
Kirby Mayer
- 3473 Safety and Feasibility of Lower Extremity Serial Casting in the Acute Care Setting**
Eyler K, Adams J
Kristin Eyler
- 3474 Effects of Neuromuscular Electrical Stimulation on Skeletal Muscle Mass and Muscle Strength in Critically Ill Patients in the Intensive Care Unit: A Systematic Review**
Rajan R, Brady M, Joyce M, Stewart M, Suchocki L, Lefebvre KM
Kristin Lefebvre
- 3475 Functional Outcomes of Liver Transplant Patients Across the Continuum**
Oldenburg L, DeBoer M, Tymkew H, Norris TL, Schallom M, Chapman WC
Laura Oldenburg

- 3476 The Feasibility of a Prehabilitation Program for Liver Transplant Patients**
Oldenburg L, DeBoer ME, Tymkew H, Norris TL, Schallom M, Chapman WC
Laura Oldenburg
- 3477 Fall Risk Assessment Using the Tinetti Following Orthopedic Surgery: A Quality Improvement Case Series**
Scardillo J, Knepper L
Lauren Knepper
- 3478 Using an Interprofessional Education Simulation in Physical Therapy Curricula to Improve Knowledge Regarding the Discharge Planning Process and the Role of Physical Therapists**
Smith LM, Sachs B, Yorke AM, Berg K, Keiser M, Turkelson C
Leslie Smith
- 3479 Development of a Facility-Specific “Bundle” of Outcome Measures for Individuals With an Acute Stroke in the Hospital Setting**
Cox M, Negrete K, Burke H, Gatewood KK
Mark Cox
- 3480 Safe Ambulation of a Patient With an Axillary Intra-aortic Balloon Pump as a Bridge to Heart Transplant: A Case Report**
Cho S, Cangialosi M
Michelle Cangialosi
- 3481 Relationship Between Physical Therapy Assessments, Need for Assistive Device, and Forced Vital Capacity in Patients With ALS**
Gorman MJ, Keniston L, Steer GA
Michelle Gorman
- 3482 Clinical Physical Features of Amyotrophic Lateral Sclerosis Illustrate Need for Earlier Physical Therapy Assessment and Intervention**
Gorman MJ, Keniston L, Hirsch TR, Brosius MA, Cooper LL, Coad K
Michelle Gorman
- 3483 Activity Levels and Length of Stay in Hospitalized Patients With Leukemia and Lymphoma**

Lee M, Klott J, Seitter H, Durham A, Flynn RB, Ross SA, Rensing K, Tymkew H, Reeves J

Monica Lee

3484 Physical Therapy Management Following the Bite of West Nile Virus With Associated Neurological Deficits: A Case Report

Askar N, Miller ME, Walter ME

Nadine Askar

3485 For Patients on Mechanical Ventilation in the ICU Is Early Mobilization or Usual Care More Effective in Improving Functional Outcome Measures?

Fay P, Cronin D, De Luca K, Demel A, Graziano N, James-Palmer AM, Kamara Y, Pfeifer B

Nicole Graziano

3486 Effects of Early Ambulation on Functional Outcomes and Hospital Length of Stay While on Bi-Level Positive Airway (BiPAP)

Greene N, Klein D

Nicole Greene

3487 The Power of Communication: The Role of PT in Managing a Patient With Dropped Head Syndrome

Laverty P, Weber K, Hubregsen A

Patricia Laverty

3488 Physical Therapy Driven Guidelines Can Assist the Medical Team in Triaging Patients Appropriately in an Acute Care Observation Unit

Hawthorne C, Laverty P

Patricia Laverty

3489 Assessment of Implementation of Safe Patient Handling Policies During Physical Therapy Interventions Within Acute Care, Subacute Care, and Skilled Nursing Facilities

Olson P, Davis CM, LaPlante S, Philips S, Graves H

Peg Olson

- 3490 Main Effect of Time on Activity, Participation, and Fatigue in Abdominal Organ Transplant Recipients Participating in a Supervised Exercise Program**
Thompson SL, Staats E, Abdeldaiem A, Schiel CL, Stevenson CR, Schaadt C, Miller KK
Samantha Thompson
- 3491 The Effect of a Pre-operative Education Session on Functional Outcomes in Patients With Total Knee and Hip Arthroplasty in an Acute Care Setting**
Holland S, Brennan D, Pathare N, Fletcher F
Sara Holland
- 3492 Role of Physical Therapy in the ICU With the Management of Life-Threatening Cat-Scratch Disease Resulting in Bilateral Below Knee Amputations**
Martinez S, Jandreau J
Shelina Martinez
- 3493 Management of Horizontal Benign Paroxysmal Positional Vertigo After Severe Traumatic Brain Injury: A Case Report**
Banks SC, Chadwick T, Wilson MR, Oklowski B
Stephen Banks
- 3494 Falls Risk in Patients Diagnosed With Critical Illness Myopathy**
Schiller M, Weber K, Gray E, Kottoor JM, Galen S
Erika Gray
- 3495 Access to Physical Therapy and Socioeconomic Status on Fear of Falling and Mobility Outcomes in Individuals With Lower Limb Loss**
Lee S, Chin TM, Fox HJ, Gutierrez J
Szu-Ping Lee
- 3496 Number of Physical Therapy Visits Predicts Discharge Disposition in Community-Dwelling Older Adults After Acute Hospitalization**
Simmons TM, Combs-Miller SA, Moore ES, Stikeleather S
Tammy Simmons

3497 Experiences of Mandated Outcome Measure Protocol Implementation in the Acute Care Setting

French A, Kennedy D, Troulliet R, Hoang T

Thuha Hoang

3498 Comparison of Subjective and Physical Function Outcomes Using Axillary Crutches and a “Hands-Free Crutch,” in Comparison to No Crutch, for Mobility

MacLeod TD, Lim GM

Toran MacLeod

3499 Are There Differences in Energy Consumption and Distance Ambulated in Young Healthy Adults Using Different Cane Types During Timed Tests?

Southard V, Colletti A, Doulos E, Petit-Frere FD, Mathew AA, Valestra A, Varghese PS

Veronica Southard

3500 A Systematic Review Examining the Exercise Parameters Required to Induce the Repeated Bout Effect Implications for Acute Care Physical Therapists

Goldberg M, Green A, Harrold T, VanWye WR

William VanWye