

## **PUBLICATIONS: STAFF WITH PHYSICAL THERAPY AFFILIATIONS**

### **2020**

Anderson KD, Field-Fote EC, Biering-Sørensen F, Bryden A, Harvey LA, Jones L, Mulcahey MJ, **Mulroy S**, Noonan VK, Post MWM, Rupp R, Schmidt-Read M. International Spinal Cord Injury Physical Therapy-Occupational Therapy Basic Data Set (Version 1.2). *Spinal Cord Series and Cases*. 2020; 6(1):74. doi: 10.1038/s41394-020-00323-z.

**Mulroy SJ**. Commentary on "A pragmatic randomized controlled trial testing the effects of the international scientific SCI exercise guidelines on SCI chronic pain: protocol for the EPIC-SCI trial". *Spinal Cord*. 2020; 58(7):731-732.

An J, **Lewthwaite R**, Lee S, Wulf G. Choice of practice-task order enhances golf skill learning. *Psychology of Sport & Exercise*. 2020;50: <https://doi.org/10.1016/j.psychsport.2020.101737>.

Chung Y-C, **Lewthwaite R**, Winstein CJ, Monterosso JR, Fisher BE. Expectancy and affective responses to challenging balance practice conditions for individuals with Parkinson's disease. *European Journal of Neuroscience*. 2020 Mar 16. doi: 10.1111/ejn.14723

Chua L-K, Wulf G, **Lewthwaite R**. Choose your words wisely: Optimizing impacts on standardized performance testing. *Gait & Posture*. 2020;79:210-216.

**DiSalvio NL**, Rosano C, Aizenstein HJ, Redfern MS, Furman JM, Jennings JR, ... & Sparto PJ. Gray matter regions associated with functional mobility in community-dwelling older adults. *Journal of the American Geriatrics Society*. 2020; 68(5):1023-1028.

Hoppes CW, Huppert TJ, Whitney SL, Dunlap PM, **DiSalvio NL**, Alshebber KM, ... & Rosso AL. Changes in cortical activation during dual-task walking in individuals with and without visual vertigo. *Journal of Neurological Physical Therapy*. 2020;Apr;44(2):156-163.

### **2019**

Chua LK, Dimapilis MK, Iwatsuki T, Abdollahipour R, **Lewthwaite R**, Wulf G. Practice variability promotes an external focus of attention and enhances motor skill learning. *Human Movement Science*. 2019. 64:307-319.

**Lighthall Haubert L**, **Mulroy SJ**, **Requejo PS**, **Maneekobkunwong S**, **Gronley JK**, **Rankin JW**, **Rodriguez D**, **Hong K**. Effect of reverse manual wheelchair propulsion on shoulder kinematics, kinetics and muscular activity in persons with paraplegia. *Journal of Spinal Cord Medicine*. 2019 Feb 15:1-13.

Nandi T, **Lewthwaite R**, Fisher BE, Salem GJ. Balance Confidence Scale: Preliminary validity, reliability, and relation to neural excitability. *Psychology of Sport and Exercise*. 2019; 43:301–310.

Papp M, Russell I, **Requejo PS**, McNitt-Gray JL, **Furumasu J**. Reaction force generation and mechanical demand Imposed on the shoulder when initiating manual wheelchair propulsion and at self-selected fast speeds. *Journal of Biomechanical Engineering*. 2019; Nov 1. doi: 10.1115/1.4045492. Online ahead of print.

Russell IM, Wagner EV, **Requejo PS**, **Mulroy S**, Flashner H, McNitt-Gray JL. Characterization of the shoulder net joint moment during manual wheelchair propulsion using four functional axes. *Journal of Electromyography and Kinesiology*. 2019 Jul 30. pii: S1050-6411(18)30511-X.

Stewart JC, **Lewthwaite R**, Rochtashel J, Winstein CJ. Self-efficacy and reach performance in individuals with mild motor impairment due to stroke. *Neural Rehabilitation and Neural Repair*. 2019, In press. doi.org/10.1177/15459683198362

Walford SL, **Requejo PS**, **Mulroy SJ**, Neptune RR. Predictors of shoulder pain in manual wheelchair users. *Clinical Biomechanics*, 2019; 65: 1-12,

Wulf G, **Lewthwaite R**. OPTIMAL theory. In D Hackfort, R Schinke, & B.Strauss (Eds), *Dictionary of Sport Psychology*. Elsevier: Amsterdam, The Netherlands, 2019.

Wulf G, **Lewthwaite R**. Optimizing attentional focus. In G. Tenenbaum & R. C. Eklund (Eds.), *Handbook of Sport Psychology* (4th ed.), John Wiley & Sons, Inc., Hoboken, NJ, 2019.

Wulf G, **Lewthwaite R**. Verbesserung motorischen Lernens in der Neurorehabilitation (Enhancing motor learning in neurorehabilitation). *Neuroreha*, 2019;11:101-106.

## **2018**

Cesar GM, **Lewthwaite R**, Sigward SM. Effects of practice on the control of whole-body momentum in active children and adults. *Journal of Motor Learning and Development*, 2018;6:185–196. doi: 10.1123/jmld.2017-0008

Chua L-K, Wulf G, **Lewthwaite R**. Onward and upward: optimizing motor performance. *Human Movement Science*. 2018;60: 107-114.

Ellis RG, **Rankin JW**, Hutchinson JR. Limb Kinematics, Kinetics and Muscle Dynamics During the Sit-to-Stand Transition in Greyhounds. *Frontiers in Bioengineering and Biotechnology*. 2018; Nov 16;6:162. doi: 10.3389/fbioe.2018.00162.

Heers AM, **Rankin JW**, Hutchinson JR. Building a bird: Musculoskeletal modeling and simulation of wing-assisted incline running during avian ontogeny. *Frontiers in Bioengineering and Biotechnology*. 2018; Oct 23;6:140. doi: 10.3389/fbioe.2018.00140.

**Horn KK**, Allen DD, Gibson-Horn C, Widener GL. Effects of torso-weighting on standing balance and falls during the Sensory Organization Test in people with multiple sclerosis. *International Journal of Multiple Sclerosis Care*. 2018; 20(2):68-75.

**Lewthwaite R**, Winstein CJ, Lane CJ, Blanton SR, Wagenheim B, Nelsen MA, Dromerick AW, Wolf SL. Accelerating stroke recovery: secondary outcomes from the Interdisciplinary Comprehensive Arm Rehabilitation Evaluation (ICARE) clinical trial. *Neural Rehabilitation and Neural Repair*. 2018;32:150-165.

**Mulroy SJ**, **Eberly VJ**, **Haubert LL**, **Conners S**. Impact of pain, pain-related beliefs, and pain coping strategies on satisfaction with life after SCI. *Archives of Physical Medicine and Rehabilitation*. 2018; 99(10):e6.

**Rankin JW**, Doney KM, McGowan CP. Functional capacity of kangaroo rat hindlimbs: Adaptations for locomotor performance. *Journal of the Royal Society Interface*. 2018 Jul;15(144):20180303. doi: 10.1098/rsif.2018.0303.

Wulf G, **Lewthwaite R**, Cardozo P, Chiviawsky S. Triple play: additive contributions of enhanced expectancies, autonomy support, and external attentional focus to motor learning. *Quarterly Journal of Experimental Psychology*, 2018;71:824–831.

Wulf G, Iwatsuki T, Machin B, Kellogg J, Copeland C, **Lewthwaite R**. Lassoing skill through learner choice. *Journal of Motor Behavior*, 2018;50:285-292.

## **2017**

- Bahmani M, Wulf G, Ghadiri F, Karimi S, **Lewthwaite R**. Enhancing performance expectancies through visual illusions facilitates motor learning in children. *Human Movement Science*, 2017;55:1-7.
- Dowling AV, **Eberly V, Maneekobkunwong S, Mulroy SJ, Requejo PS**, Gwin JT. Telehealth monitor to measure physical activity and pressure relief maneuver performance in wheelchair users. *Assistive Technology*. 2017 Winter;29(4):202-209.
- Iwatsuki T, Abdollahipour R, Psotta R, **Lewthwaite R**, Wulf G. Autonomy facilitates repeated maximum force productions. *Human Movement Science*. 2017;55: 264-268.
- Halperin I, Chapman DT, Martin DT, **Lewthwaite R**, Wulf G. Choices enhance punching performance of competitive kickboxers. *Psychological Research*. 2017;81:1051-1058.
- Lemos A, Wulf G, **Lewthwaite R**, Chiviawosky S. Autonomy support enhances performance expectancies, positive affect, and motor learning. *Psychology of Sport and Exercise*. 2017; 31:28-34.
- Lewthwaite R**, Wulf G. Optimizing motivation and attention for motor performance and learning. *Current Opinions in Psychology*, 2017;31:28-34.
- Mulroy SJ, Haubert LL, Eberly VJ, Conners S, Weiss W**. Effectiveness of two intervention programs to prevent shoulder pain after spinal cord injury. *Archives of Physical Medicine and Rehabilitation*. 2017; 98(12):e174.

## **2016**

- Garshick E, **Mulroy S**, Graves D, Greenwald K, Horton JA, Morse LR. An active lifestyle is associated with reduced dyspnea and greater life satisfaction in spinal cord injury. *Archives of Physical Medicine and Rehabilitation*. 2016; 97(10):1721-7.
- Hatchett PE, Mulroy SJ, Eberly VJ, Haubert LL, Requejo PS**. Body mass index changes over 3 years and effect of obesity on community mobility for persons with chronic spinal cord injury. *Journal of Spinal Cord Medicine*. 2016; 39:421-32.
- Mulroy SJ, Hatchett PE, Eberly VJ, Haubert LL, Gronley JK, Conners S**, Garshick E, **Requejo PS**. Objective and self-reported physical activity measures and their association with depression and satisfaction with life in persons with spinal cord injury. *Archives of Physical Medicine and Rehabilitation*. 2016; 97:1714-20.
- Panagiotopoulou O, **Rankin JW**, Gatesy SM, Hutchinson JR. A preliminary case study of the effect of shoe-wearing on the biomechanics of a horse's foot. *PeerJ*. 2016; 4:e2164. doi: 10.7717/peerj.2164
- Rankin JW**, Rubenson J, Hutchinson JR. Inferring muscle functional roles of the ostrich pelvic limb during walking and running using computer optimization. *Journal of the Royal Society Interface*. 2016;13(118):20160035. doi: 10.1098/rsif.2016.0035.
- Slowik JS, McNitt-Gray JL, **Requejo PS, Mulroy SJ**, Neptune RR. Compensatory strategies during manual wheelchair propulsion in response to weakness in individual muscle groups: A simulation study. *Clinical Biomechanics (Bristol, Avon)*. 2016; 33:34-41.

Slowik JS, **Requejo PS**, **Mulroy SJ**, Neptune RR. The influence of wheelchair propulsion hand pattern on upper extremity muscle power and stress. *Journal of Biomechanics*. 2016 14;49(9):1554-61.

Winstein CJ, Wolf SL, Dromerick AW, Lane CJ, Nelsen MA, **Lewthwaite R**, Cen SY, Azen SP for the Interdisciplinary Comprehensive Arm Rehabilitation Evaluation (ICARE) Investigative Team. Effect of a task-oriented rehabilitation program on upper extremity recovery following motor stroke: The ICARE randomized clinical trial. *JAMA*. 2016; 315(6):571-581. doi:10.1001/jama.2016.0276.

Wulf G, & **Lewthwaite R**. Optimizing performance through intrinsic motivation and attention for learning: The OPTIMAL theory of motor learning. *Psychonomic Bulletin & Review*. 2016; 23:1382–1414.

### **PRESENTATIONS: STAFF WITH PHYSICAL THERAPY AFFILIATIONS**

#### **2020**

**Furumasu J, Mata C, Buckner R**, Shanfield K. Putting the parts together: Wheelchair seating, mobility, and assistive technology to enhance quality of life. Workshop presented at the International Seating Symposium, Vancouver, Canada, March, 2020 (also 2018).

**Furumasu J**, Weins C, **Requejo PS**, McNitt J. Effect of personalized wheelchair configuration on upper extremity mechanics during manual wheelchair propulsion. Paper presented at the International Seating Symposium, Vancouver, Canada, March, 2020.

**Gallardo O**. Motivational interviewing. Continuing education course provided to the Northeast District of the California Physical Therapy Association. July, 2020.

**Horn KK, Lewthwaite R**. Early success for patient and therapist alike: A case study of an OPTIMAL theory-inspired collaboration. Paper presented at the Combined Sections Meeting of the American Physical Therapy Association, Denver, CO, February, 2020. [Awarded Education Innovation poster]

**Kiseljak-Dusenbury S, Mulroy SJ**. The impact of gender on wellness center participation and outcomes in persons with disabilities. Paper presented at the American Physical Therapy Association Combined Sections Meeting, Denver, CO February, 2020. [Recognized by the Global Health SIG for work in Social Responsibility]

**Kubota K, Weiss W**. Observational gait analysis: Maximizing gait outcomes through targeted interventions for individuals with neurologic impairments. Invited lecture/lab as part of the Neurologic Physical Therapy Professional Education Consortium, Los Angeles, CA. August 2020 (also 2019, 2018, 2017, 2016).

**Kubota K, Weiss W**. Rancho gait review: Phases and critical events. Invited webinar as part of the Neurologic Physical Therapy Professional Education Consortium, Los Angeles, CA. July 2020 (also 2019, 2018, 2017, 2016).

**Lewthwaite R, Horn KK**, Broberg M. OPTIMAL motor skill learning. Invited presentation for the Neurologic Physical Therapy Professional Education Consortium, Los Angeles, CA. August 2020 (also 2019, 2018, 2017).

**Robinson J**. Racism and discrimination within PT: The beginning of the conversation with colleagues. Invited presentation within California Physical Therapy Association Townhall, September, 2020.

**Thompson ML.** Aging with a disability. Invited lecture for the Neurologic Physical Therapy Professional Education Consortium, Los Angeles, CA. August 2020 (also 2019, 2018, 2017, 2016).

## **2019**

**Buckner R, Mata C.** Putting the parts together: Wheelchair seating, mobility, and assistive technology to enhance quality of life. Continuing Education Workshop presented at Rancho Los Amigos National Rehabilitation Center, Downey, CA, October, 2019.

Chua L-K, **Lewthwaite R**, & Wulf G. Choose your words wisely: Optimizing impacts on standardized performance testing. Paper presented at the conference of the North American Society for the Psychology of Sport and Physical Activity, Baltimore, MD, June, 2019.

Chua L-K, Kim T, Jimenez-Diaz J, **Lewthwaite R**, Wulf G. External focus is superior to an internal focus of attention: Meta-analyses of motor learning and performance. Paper presented at the conference of the North American Society for the Psychology of Sport and Physical Activity, Baltimore, MD, June, 2019.

**DiSalvio NL.** Implementation of OPTIMAL theory: case studies. Presented at the Neuroresidency Grand Rounds, University of Southern California, Los Angeles, CA, August, 2019.

Bellinger GC, **Dugan R**, Meng Q, Solawa A, Tay A, Ellis MD. An interim analysis investigating the predictive capacity of strength, synergy, spasticity, and passive range of motion on reaching function in chronic moderate to severe hemiparetic stroke. Paper presented at the Combined Sections Meeting of the American Physical Therapy Association, Washington, DC, February, 2019.

**Haubert LL, Eberly V, Mulroy S, Conners S, Requejo P, Maneekobkunwong S.** Comparison of stroke-count accuracy of two commercially available wrist-worn activity monitors to actual strokes during continuous manual wheelchair propulsion for six minutes in persons with paraplegia. Paper presented at the American Spinal Injury Association, Waikiki, HI, April, 2019.

**Horn KK, Lewthwaite R**, Nelsen MA, Fitzgerald E, Winstein CJ. Impacts of patient choice, collaboration, and control in stroke rehabilitation. Paper presented at the Combined Sections Meeting of the American Physical Therapy Association, Washington, DC, February, 2019. [Awarded Best Clinical Research poster]

**Kubota K.** The essential elements of normal gait with an introduction to a decision-making algorithm for orthotic prescription. Invited lecture for the University of New Mexico Distinguished Lecture Series, Albuquerque, NM. May 2019.

**Kubota K.** Rancho gait review: Pathologic gait. Invited lecture for physical therapy students and professors from Tokyo (Japan) Medical College. Downey, CA. November 2019 (also 2018).

**Mockeridge J, Lazouras C, Gallardo O, Kasayama J, Lewthwaite R.** High intensity functional exercise group class for acute rehabilitation. Paper presented at the annual conference of the American Congress of Rehabilitation Medicine, Chicago, IL, November, 2019.

**Mulroy S, Eberly V, Haubert LL, Requejo P.** Effect of pain coping strategies on pain interference, self-efficacy, and satisfaction with life in persons with SCI and chronic pain. Paper presented at the annual meeting of the Rehabilitation Psychology section (Section 22) of the American Psychology Association, Orlando, FL, February, 2019.

**Mulroy S, Haubert LL, Eberly V, Conners S, Requejo P, Maneekobkunwong S.** The penalty of chronic pain in the lower extremities after SCI. Paper presented at the American Spinal Injury Association, Waikiki, HI, April, 2019.

**Rankin JW, Haubert LL, Requejo PS, Mulroy SJ.** Using modeling and simulation to predict muscle demand during forward and reverse wheelchair propulsion. Paper presented at the American Spinal Injury Association, Waikiki, HI, April, 2019.

**Shaw, S, Kasayama, J, Chu R, Blydt-Hansen E.** Intensive therapy utilizing robotic mobility technology improves motor function post-cerebral hemispherectomy. Paper presented at the annual conference of the American Congress of Rehabilitation Medicine, Chicago, IL, November, 2019.

**Turnquist P.** Transcutaneous neuromodulation of spinal cord restores bladder and bowel function after neurological dysfunction. Presented at the SCI Model Systems Annual Leadership Conference, October, 2019.

## **2018**

Chua L-K, Wulf G, **Lewthwaite R.** Onward and upward: Optimizing vertical jump performance. Paper presented at the annual conference of the North American Society for the Psychology of Sport and Physical Activity, Denver, CO, June, 2018.

Dirstine D, **Gallardo O.** The effects of body-weight supported treadmill training on gait kinematics of an individual with juvenile onset Huntington's Disease: A case report. Paper presented at the Combined Sections Meeting of the American Physical Therapy Association, New Orleans, LA, February, 2018.

**Horn KK.** Impacts of patient choice, collaboration, and control in stroke rehabilitation. Presented at the Neuroresidency Grand Rounds, University of Southern California, Los Angeles, CA, August, 2018.

**Kasayama J, Blydt-Hansen E, Lewthwaite R, Shaw S.** Effect of brief intensive robotics-assisted therapy on improved walking endurance many years after cerebral hemispherectomy. Paper presented at the Combined Sections Meeting of the American Physical Therapy Association, New Orleans, LA, February, 2018.

**Kasayama J, Kiseljak-Dusenbury S, Lewthwaite R, Shaw S.** Intensive robotic-assisted therapy over 2 consecutive "robocamps" is associated with walking benefits for an adolescent with right hemispherectomy: a case report. Paper presented at the Combined Sections Meeting of the American Physical Therapy Association, New Orleans, LA, February, 2018.

**Kubota K.** Rancho gait review with an introduction to the Rancho R.O.A.D.M.A.P. Invited lecture for the University of Dayton Doctor of Physical Therapy Program. Advancing Mobility with Advanced Technologies and Timeless Principles. November, 2018 (also 2017).

**Kubota K, Eberly V, Mulroy SJ, Requejo P.** Utilization of an interactive, educational smartphone/tablet "app" to teach and review gait analysis (RanchoGait) and Orthotic Decision-Making (Rancho R.O.A.D.M.A.P.). Platform Presentation for the Education Section of APTA for 2018 APTA Combined Sections Meeting. New Orleans, LA, February, 2018.

**Levin D.** Assessment and Intervention for clients s/p TBI. Presentation at the Rehab Institute of Oregon, Portland OR, June, 2018.

Matthews N, Lochala C, Thomas N, Marchbanks S, **Lewthwaite R**, Fisher B. The impact of social relatedness within a group exercise setting in persons with Parkinson's Disease. Paper presented at the Combined Sections Meeting of the American Physical Therapy Association, New Orleans, LA, February, 2018.

**Mulroy SJ.** Lower extremity muscle activity after stroke: A window into CNS injury, recovery, and response to rehabilitation”, Invited presentation at the Zlotowski Center for Neuroscience, Ben Gurion University of the Negev, March 21, 2018.

**Mulroy SJ.** Treating and preventing shoulder pain after SCI.” Invited presentation to the Department of Physiotherapy, Ben Gurion University of the Negev, March 22, 2018.

**Mulroy SJ, Eberly VJ, Haubert LL, Conners S.** Impact of pain, pain-related beliefs, and pain coping strategies on satisfaction with life after SCI. Paper presented at the annual conference of the American Congress of Rehabilitation Medicine, Dallas, TX, October, 2018.

**Rankin JW, Facer K, Newby N, McGowan CP.** Pediatric manual wheelchair propulsion: Movement patterns and muscle activity across age. Paper presented at the annual conference of the American Congress of Rehabilitation Medicine, Dallas, TX, October, 2018.

Schultz E, **Lewthwaite R**, Chanthaphun S, Winstein C. Relationships among patient-reported and performance-based outcome measures after stroke. Paper presented at the Combined Sections Meeting of the American Physical Therapy Association, New Orleans, LA, February, 2018.

**Turnquist P.** Upper extremity control and dynamics during manual wheelchair propulsion with different wheelchair configurations. Presented at the SCI Model Systems Annual Leadership Conference, October, 2018.

## **2017**

**Haubert LL, Requejo P, Mulroy S, Maneekobkunwong S, Gronley J.** Comparison of propulsion characteristics and shoulder muscle activity during wheelchair propulsion with a Rowheel (pulling back) compared to traditional forward propulsion in persons with paraplegia. Paper presented at the American Spinal Injury Association, Albuquerque, NM, April, 2017.

Hedman LD, **Horn KK**, Sayranian M, Krifka M, Wu M, Martin L. Reactive lateral step treadmill training for paretic limb step initiation in chronic stroke. Paper presented at the Combined Sections Meeting of the American Physical Therapy Association, San Antonio, TX, February, 2017.

Iwatsuki T, Abdollahipour R, Psotta R, **Lewthwaite R**, Wulf G. Autonomy facilitates repeated maximum force production. Paper presented at the annual conference of the North American Society for the Psychology of Sport and Physical Activity, San Diego, CA, June, 2017.

**Kasayama JY, Turnquist P, Lazouras CJ, Myler A, Alvarenga WE, Blydt-Hansen E, Lewthwaite R.** Walking ability of adolescents after childhood cerebral hemispherectomy. Paper presented at the Combined Sections Meeting of the American Physical Therapy Association, San Antonio, TX, February, 2017.

**Kiseljak-Dusenbury S, Alvarenga W, Bisson T.** A high-intensity, periodic model of traditional and robotic therapy for an adolescent with left hemispherectomy: A Case Report. Paper presented at the American Physical Therapy Association Combined Sections Meeting, San Antonio, TX, February, 2017.

**Kubota K.** Rancho observational gait analysis: The Rancho R.O.A.D.M.A.P., and targeted interventions for individuals with neurologic involvement. Invited by Stanbridge University Physical Therapist Assistant Program, 1.5 Day Continuing Education Course for Clinical Instructors for PTA Students from Stanbridge University. Irvine, CA. June 2017.

**Kubota K, Weiss W.** Rancho observational gait analysis: Maximizing gait outcomes through targeted interventions for individuals with neurologic impairment. Invited by Cottage Rehabilitation Hospital, Two-Day Continuing Education Course, Santa Barbara, CA, March, 2017.

**Kubota K, Weiss W.** Rancho observational gait analysis: Maximizing gait outcomes through targeted interventions for individuals with neurologic impairments. Invited by Nebraska Physical Therapy Association for Nebraska State Physical Therapy Association Spring Conference, Two-Day Continuing Education Course, Kearney, NE. April 2017.

**Kubota K, Weiss W.** Rancho observational gait analysis. One-day continuing education workshop at Rancho Los Amigos National Rehabilitation Center, Downey, CA, November 2017.

**Kubota K, Eberly V, Requejo P, Mulroy S, Rodriguez D, Maneekobkunwong S, Williams C.** Ongoing progress in an interactive smartphone/tablet “app” to review Rancho gait and use of an algorithm to guide orthotic decision-making (Rancho R.O.A.D.M.A.P.). Poster presented at the Combined Sections Meeting of the APTA, San Antonio, TX, February 2017.

**Levin D, Alvarez R.** Rancho observational gait. Continuing education course, Rancho Los Amigos National Rehabilitation Center, November 2017.

**Lewthwaite R.** Optimizing motor learning in neurological rehabilitation. Precision Rehabilitation, Long Beach, CA. Invited presentation. December, 2017.

**Lewthwaite R, Broberg M.** Optimizing motor performance and learning in rehabilitation. Two Trees Physical Therapy & Wellness, Ventura, CA, Invited presentation. October, 2017.

**Lewthwaite R, Wulf G.** Enhancing movement automaticity through the optimization of attention and motivation: II. Paper presented at the International Symposium: Human Multitasking from an Attention, Learning, and Action Perspective, Aachen, Germany, June, 2017.

**Lewthwaite R, Wulf G.** Optimizing motor learning in neurological rehabilitation. Presented at the 38th Annual Neurorehabilitation Conference, Braintree Rehabilitation Hospital, Cambridge, MA, November, 2017.

**Lewthwaite R, Wulf G, Studer M.** Optimizing motor learning in rehabilitation: OPTIMAL theory and applications. Paper presented at the Combined Sections Meeting of the American Physical Therapy Association, San Antonio, TX, February, 2017.

**Mata C.** SSKIN: An interprofessional approach to wound care management. Paper presented at the Association of Rehabilitation Nurses Annual Conference, West Palm Beach, FL, October, 2017.

**Mulroy S, Haubert LL, Eberly V, Weiss W, Connors S.** Effectiveness of two interventions to prevent shoulder pain after spinal cord injury. Paper presented at the annual conference of the American Congress of Rehabilitation Medicine, Atlanta, GA, October, 2017.

**Turnquist P.** Evaluation of two physical activity programs in wheelchair users with SCI: Updates from the Pathokinesiology Laboratory at Rancho Los Amigos. Presented at the SCI Model Systems Annual Leadership Conference, October, 2017.

**Turnquist P, Mata C.** Interdisciplinary approach to neurogenic bowel management. Paper presented at the Association of Rehabilitation Nurses Annual Conference, West Palm Beach, FL, October, 2017.



**Weiss W, Kubota K.** Rancho observational gait analysis for targeted treatment and maximal recovery for individuals with neurologic impairment. Invited by Physical Therapy Association of Washington (PTWA) for 2017 PTWA Conference, Two-Day Continuing Education Course, SeaTac, WA, October 2017.

Wulf G, **Lewthwaite R.** Attentional focus and motor learning. Invited presentation to the 38th Annual Neurorehabilitation Conference, Braintree Rehabilitation Hospital, Cambridge, MA, November, 2017.

Wulf G, **Lewthwaite R.** Enhancing movement automaticity through the optimization of attention and motivation: I. Paper presented at the International Symposium: Human Multitasking from an Attention, Learning, and Action Perspective, Aachen, Germany, June, 2017.

Wulf G, Moslem B, Ghadriri F, Karimi S, **Lewthwaite R**, Chua L-K. Enhancing performance expectancies through visual illusions facilitates motor learning in children. Paper presented at the annual conference of the North American Society for the Psychology of Sport and Physical Activity, San Diego, CA, June, 2017.

## **2016**

Chen Y-A, **Lewthwaite R**, & Winstein C. Using ecological momentary assessments to study the impact of social-cognitive factors on paretic hand use after stroke. Paper presented at the annual conference of the North American Society for the Psychology of Sport and Physical Activity, Montreal, Canada, June, 2016.

Chen Y-A, **Lewthwaite R**, Monterosso J, Schweighofer N, Winstein C. Mobile phone-based ecological momentary assessment of day-to-day paretic hand use following stroke. Paper presented at the American Society for Neurorehabilitation, San Diego, CA, November 2016.

Chung Y-C, **Lewthwaite R**, Winstein CJ, & Fisher BE. Dynamics of self-efficacy and performance change with balance practice in individuals with Parkinson's disease. Paper presented at the annual conference of the North American Society for the Psychology of Sport and Physical Activity, Montreal, Canada, June, 2016.

Chung Y-C, **Lewthwaite R**, Winstein C, Fisher B. Impact of enhancing expectations on self-efficacy and motor learning in individuals with Parkinson's disease. Paper presented at the American Society for Neurorehabilitation, San Diego, CA, November 2016.

Hooyman A, Dorton H, Alvez J, Walter N, Winstein C, **Lewthwaite R**, Tjan B. Brain imaging paradigm shows promise for attentional focus research: A feasibility study using functional magnetic resonance imaging. Paper presented at the annual conference of the North American Society for the Psychology of Sport and Physical Activity, Montreal, Canada, June, 2016.

Hutchinson JR, Ellis RG, **Rankin JW.** Predicting greyhound sit-to-stand muscle dynamics using computer simulation Integrative and Comparative Biology. 2016; 56, e99-e99.

Kay DB, Monterosso J, **Lewthwaite R**, Kutch J, Schweighofer N, Winstein C. Using neuroimaging to study the impact of motivation on brain activity during motor learning: methodological considerations. Paper presented at the American Society for Neurorehabilitation, San Diego, CA, November ,2016.

**Kubota K.** Rancho normal gait. Invited lecture for physical therapy students and professors from Tokyo (Japan) Medical College. Downey, CA, November, 2016.

**Kubota K**, Danan I, Williams V, Kim S, Gerona C, Moreno C, Ivey C, Schwartz J, Burke-Doe A, Byl N. CAL-PT-FUND and CPTA Research Symposium: Concussion and Brain Injury. Invited by California Physical Therapy Association (CPTA) to participate in a Two-Day Continuing Education Course, Long Beach, CA, November, 2016.

**Kubota K, Weiss W.** Rancho observational gait analysis: Maximizing gait outcomes through targeted interventions for individuals with neurologic impairment. Invited by California Physical Therapy Association (CPTA). Two-Day Continuing Education Course, Sacramento, CA. November, 2016.

**Kubota K, Weiss W.** Rancho observational gait analysis: Maximizing gait outcomes through targeted interventions for individuals with neurologic impairment. Invited (by California Chapter (CPTA) of the American Physical Therapy Association (APTA)) Two-Day Pre-Conference Course at the Combined Sections Meeting of the APTA, Anaheim, CA, February, 2016.

**Kubota K**, Tibbetts C. The art of communication: Make a connection to quickly establish trust for a successful partnership with your patients. Invited lecture for the CPTA California Student Conclave, San Diego, CA, April, 2016.

Lemos A, Wulf G, **Lewthwaite R**, & Chiviawosky S. Autonomy support enhances performance expectancies, task-focus, and learning: Support for the OPTIMAL theory of motor learning. Paper presented at the annual conference of the North American Society for the Psychology of Sport and Physical Activity, Montreal, Canada, June, 2016.

**Mulroy SJ.** Secondary prevention for individuals with disabilities: Lessons from shoulder pain after spinal cord injury. Invited presentation at the NIH Conference on Rehabilitation Research at NIH: Moving the Field Forward. Bethesda, MD, 2016.

Panagiotopoulou O, **Rankin JW**, Gatesy SM, Hutchinson JR. A preliminary case study of the effect of shoe-wearing on the biomechanics of a horse's foot. *PeerJ*. 2016; 4:e2164. doi: 10.7717/peerj.2164

**Rankin JW**, Paxton HP, Hutchinson JR, Daley M. Ontogenetic changes in broiler chicken walking capability. *Integrative and Comparative Biology*. 2016; 56, e354-e354.

**Rankin JW**, Rubenson J, Hutchinson JR. Inferring muscle functional roles of the ostrich pelvic limb during walking and running using computer optimization. *Journal of the Royal Society Interface*. 2016; 13(118):20160035. doi: 10.1098/rsif.2016.0035.

**Rankin JW**, Velo-Anton G, Nicieza AG, Hutchinson JR. Ontogenetic changes in locomotor mechanics and performance in fire salamanders. *Integrative and Comparative Biology*. 2016; 56, e179-e179.

**Turnquist P.** Wearable technology for telecare monitoring of persons with subacute and chronic SCI. Presented at the SCI Model Systems Annual Leadership Meeting, October, 2016.

Wulf G, **Lewthwaite R.** Enhancing motor learning: The OPTIMAL theory. Presented at the Gentile Memorial Conference, New York, November, 2016.

Wulf G, & **Lewthwaite R.** Optimizing performance through intrinsic motivation and attention for learning: The OPTIMAL theory of motor learning. Paper presented at the annual conference of the North American Society for the Psychology of Sport and Physical Activity, Montreal, Canada, June, 2016.

Wulf G, **Lewthwaite R.** Training par excellence: The OPTIMAL theory of motor learning. Keynote presentation at the Art in Motion – Training for Excellence, University of Music and Performing Arts, Munich, Germany, June 2016.

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