Kai-Yu Ho, PT, DPT, PhD
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Education

PhD	University of Southern California – Los Angeles, CA	2007-2012	Biokinesiology
DPT	College of St. Scholastica	2022-2023	Physical Therapy
MS	National Cheng Kung University – Tainan, Taiwan	2002-2004	Physical Therapy
BS	National Cheng Kung University – Tainan, Taiwan	1998-2002	Physical Therapy

Licensure

- Nevada State Board of Physical Therapy Examiners, License # 3256 (12/2015-present)
- New York State Education Department, Physical Therapy License # 038087 (8/2014-7/2017)
- Taiwan Ministry of Health and Welfare, Physical Therapy License # 2904 (8/2002-present)

Employment

July 2019 – present	**Associate Professor** (Tenured) – Department of Physical Therapy, School of Integrated Health Sciences, University of Nevada, Las Vegas
Mar 2018 – June 2019	**Assistant Professor** (Adjunct) – School of Medicine, University of Nevada, Las Vegas
Aug 2013 – June 2019	**Assistant Professor** (Tenure-track) – Department of Physical Therapy, School of Integrated Health Sciences, University of Nevada, Las Vegas
Aug 2007 – Dec 2012	**Research Assistant/ Teaching Assistant** – Division of Biokinesiology & Physical Therapy, School of Dentistry, University of Southern California
July 2006 – July 2007	**Teaching Assistant** – School and Graduate Institute of Physical Therapy, College of Medicine, National Taiwan University
July 2004 – Feb 2006	**Staff Physical Therapist** - Sports Medicine Center, Chang Gung Memorial Hospital, Kaohsiung, Taiwan

Peer Reviewed Publications

1. **Ho KY**, Wallace C, Aquino J, Broadwell B, Whimple M, Liang JN. Exploring the use of bimodal transcranial direct current stimulation to enhance movement in individuals with patellofemoral pain—A sham-controlled double blinded pilot study. Frontiers in Human Neuroscience. 2024; 18:1427091.
2. Demirjian TA, Crues J, **Ho KY**, Tsai LC, Powers C. Patellar articular overlap is better associated with patellar alignment during weight-bearing than traditional measures of patellar height. The Knee. 2024; 49: 176-182.
3. Hilgenkamp T, Lum R, Roys C, Souza T, Stopka D, Mann S, **Ho KY**. Effects of a 12-week telehealth exercise intervention on gait speed and gait deviations in adults with Down syndrome. Journal of Intellectual Disability Research. 2024; 68(6): 598-609.
4. Barrett T, **Ho KY**, Rasavage J, Wilson M, Goo-Tam M, Trumbull T. Implementation of 2D Running Gait Analysis in Orthopedic Physical Therapy Clinics. International Journal of Sports Physical Therapy. 2023; V18(3):606-618.
5. Shih Y, **Ho KY**. Lower extremity support moment and distribution of joint moments during sloped running. Journal of Sports Science and Medicine. 2023 ;22(1):111-116.

6. Guerrero K, Umagat A, Barton M, Martinez A, **Ho, KY**, Mann S, Hilgenkamp T. The Effect of a Telehealth Exercise Intervention on Balance in Adults with Down Syndrome. Journal of Applied Research in Intellectual Disabilities, 2023 ;36(2):385-393.
7. **Ho KY,** Liang JN, Budge S, Madriaga A, Meske K, Nguyenton D. Brain and spinal cord adaptations associated with patellofemoral pain: a systematic review and meta-analysis. Frontiers in Integrative Neuroscience. 2022; 16:791719.
8. **Ho, KY**, Barrett T, Clark Z, Fox T, DuVall C, Howden C, Murata A. Comparisons of trunk and knee mechanics during various speeds of treadmill running between runners with and without patellofemoral pain: a preliminary study. Journal of Physical Therapy Science. 2021; 33: 737–741.
9. Liang JN, Budge S, Madriaga A, Meske K, Nguyenton D, **Ho KY**. Neurophysiological changes of brain and spinal cord in individuals with patellofemoral pain: a systematic review and meta-analysis protocol. BMJ Open. 2021; 11: e049882.
10. **Ho KY**, Murata A. Asymmetries in dynamic valgus index after anterior cruciate ligament reconstruction: a proof-of-concept study. International Journal of Environmental Research and Public Health. 2021; 18: 7047.
11. Liang JN, **Ho KY**, Lee YJ, Ackley C, Aki K, Arias J, Trinh J. Slow walking in individuals with chronic post-stroke hemiparesis: speed mediated effects of gait kinetics and ankle kinematics. Brain Sciences. 2021; 11, 365.
12. **Ho KY**, Chen YJ, Farrokhi S, Tsai LC, Liao TC, Haas N, Powers CM. Selective atrophy of the vastus medialis: Does it exist in females with nontraumatic patellofemoral pain? American Journal of Sports Medicine. 2021; 49(3):700–705.
13. Liang JN, **Ho KY**, Hung V, Reilly A, Wood R, Yuskov N, Lee YJ. Effects of augmented somatosensory input using vibratory insoles to improve walking in individuals with chronic post-stroke hemiparesis Gait & Posture. 2021; 86: 77-82.
14. **Ho KY**, Cummins A, Khuu C, Parker S, Shepherd S. Comparisons of patellar bone mineral density between individuals with and without patellofemoral pain. The Knee. 2020; 27(3): 846-853.
15. Liang JN, **Ho KY**. Altered Achilles tendon morphology in individuals with chronic post-stroke hemiparesis: A case report. BMC Medical Imaging. 2020; 20(1): 34
16. **Ho KY**, Liang JN. Calcium Pyrophosphate Deposition Disease in the Achilles Tendon. Journal of the Belgian Society of Radiology. 2019; 103(1): 79, 1–2.
17. **Ho KY**, Harty M, Kellogg J, Teter K, Lee SP, Chang YJ, Basford G. Patellar tendon morphology in trans-tibial amputees utilizing a prosthesis with a patellar-tendon-bearing feature. Nature Scientific Reports. 2019; 9, 16392.
18. Liang JN, Lee YJ, Akoopie E, Conway B, Koch T, **Ho KY**. Impaired H-reflex adaptations following slope walking in individuals with post-stroke hemiparesis. Frontiers in Physiology. 2019; 10: 1232.
19. **Ho KY**, Liang JN. Asymmetric crying faces syndrome. Journal of Pediatrics. 2019; 212: 235.
20. **Ho KY**, Baquet A, Chang YJ, Chien LC, Harty M, Basford G, Kulig K. Factors related to intra-tendinous morphology of Achilles tendon in runners. Plos One. 2019; 14(8):e0221183
21. **Ho KY**, Deaver BB, Nelson T, Turner C. Using a mobile application to assess knee valgus in healthy and post-anterior cruciate ligament reconstruction participants. Journal of Sport Rehabilitation. 2019; 28(5): 532-535.
22. **Ho KY**, McClaren J, Sudweeks S. Acute effects of walking on the deformation of femoral articular cartilage in older adults. Journal of Geriatric Physical Therapy. 2019; 42(3): E35-E41.
23. **Ho KY**, Gross R, Gaal W, Nguyen A. Incomplete Fracture of the Anterior Superior Iliac Spine. Journal of Orthopaedic & Sports Physical Therapy. 2019; 49 (5): 355-355.
24. **Ho KY**, Laskowski B, Garcia D, Hardy C, Puentedura E. Measurement of anterior translation of the mandibular condyle using sonography. The Journal of Physical Therapy Science. 2019; 31 (1), 116-

121.

25. **Ho KY**, French T, Klein B, Lee Y. Patellofemoral joint stress during incline and decline running. Physical Therapy in Sport. 2018; 34: 136-140.
26. **Ho KY**, Epstein R, Garcia R, Riley N. Effects of patellofemoral taping on patellofemoral joint alignment and contact area. Journal of Orthopaedic & Sports Physical Therapy. 2017; 47 (2): 115-123.
27. **Ho KY,** Kulig K. Changes in water content in response to an acute bout of eccentric loading in a patellar tendon with a history of tendinopathy: a case report, Physiotherapy Theory and Practice. 2016; 32 (7): 566-570.
28. **Ho KY,** Standerfer A, Ngo S, Daun K, Lee SP. Effects of fast walking on tibiofemoral bone water content in middle-aged adults. Clinical Biomechanics. 2016; 37: 65-69.
29. **Ho KY**, Ho S, Colletti P.M. Use of ultrasonography for assessing treatment efficacy in a case with ankylosis of the temoporomandibular joint, Journal of Orthopaedic & Sports Physical Therapy. 2016; 46(3):225.
30. Liao TC, Young N, **Ho KY**, Farrokhi S., Powers C.M. Internal rotation of the femur increases patella cartilage stress: evaluation using finite element analysis in persons with patellofemoral pain, Medicine & Science in Sports & Exercise. 2015; 47(9):1775-80.
31. **Ho KY**, Hu H.H., Colletti P.M., Powers C.M. Recreational runners with patellofemoral pain exhibit elevated patella water content. Magnetic Resonance Imaging. 2014; 32(7):965-8.
32. **Ho KY**, Hu H.H., Colletti P.M., Powers C.M. Running-induced patellofemoral pain fluctuates with changes in patella water content. European Journal of Sport Science. 2014:14(6):628-34.
33. Powers C.M., **Ho KY**, Chen YJ, Souza R.B., Farrokhi S. Patellofemoral joint stress during weight bearing and non-weight bearing exercises. Journal of Orthopaedic & Sports Physical Therapy. 2014: 44(5):320-327.
34. **Ho KY**, Keyak J.H., Powers C.M. Comparison of patella bone strain between females with and without patellofemoral pain: a finite element analysis study. Journal of Biomechanics. 2014: 47(1): 230-236.
35. **Ho KY**, Hu H.H., Keyak J.H., Colletti P.M., Powers C.M. Measuring bone mineral density with Fat-Water MRI: Comparison with computed tomography. Journal of Magnetic Resonance Imaging. 2013: 37 (1): 237-242.
36. **Ho KY**, Blanchette M.G., Powers C.M. The influence of heel height on patellofemoral joint kinetics during walking. Gait and Posture. 2012: 36 (2): 271-275.
37. **Ho KY**, Hsu AT. Displacement of the head of humerus while performing “mobilization with movements" in glenohumeral joint: A cadaver study. Manual Therapy. 2009: 14(2): 160-166.
38. Hwang IS, Lin YC, **Ho KY.** Modulation of soleus H-reflex amplitude and variance during pretibial contraction--effects of joint position and effort level. International Journal of Neuroscience. 2002: 112(6): 623-38.

Refereed Articles in Review

1. **Ho KY**, Taylor L, Joines K. Physical Therapy Management for Delayed Diagnosis of Developmental Dysplasia of the Hip: A Case Study. Submitted.
2. Liang JN, Bashford G, Kulig K, **Ho KY.** Morphological adaptations of the Achilles tendon in individuals with chronic post-stroke hemiparesis. Submitted.
3. Gosse B, Nguyen K, Zelensky Z, Mann S, **Ho KY**, Hilgenkamp T, Improved gait quality and speed in adults with Down syndrome when wearing supportive shoes. Submitted.
4. Lee H, Rider, JV, Navalta, JW, Lekhak, N, **Ho KY**, Landers MR. Cognitive Behavioral Therapy Approach for Fear of Falling Avoidance Behavior in Older Adults: A Scoping Review. Submitted.

5. **Ho KY**, Carpio M, Donohue J, Kissman J, Liang JN. Comparison of Gluteal Muscle Central Activation in Individuals With and Without Patellofemoral Pain. Submitted.

Peer Reviewed Scientific and Professional Presentations

1. **Ho KY**, Lin CF. Evaluating Hip Strength, Mobility, and Balance in Children with Treated Unilateral Hip Dysplasia. 2025 APTA Combined Sections Meeting, Houston, February 13-15. Accepted.
2. Casillas DM, Lesley Ruiz L, **Ho KY**, Liang JN. Altering Somatosensory Input Via Different Footwear to Improve Post-Stroke Walking. 2025 APTA Combined Sections Meeting, Houston, February 13-15. Accepted.
3. Donohue JS, Carpio M, Kissman JP, Liang JN, **Ho KY**. Comparisons of Central Activation of Gluteal Muscles between Individuals with and without Patellofemoral Pain. 2025 APTA Combined Sections Meeting, Houston, February 13-15. Accepted.
4. Taylor L, **Ho KY**. Physical Therapy for Delayed Diagnosis of Developmental Dysplasia of the Hip. 2025 APTA Combined Sections Meeting, Houston, February 13-15. Accepted.
5. **Ho KY**, Wallace C, Aquino J, Broadwell B, Whimple M, Liang JN. Enhancing Movement in Patellofemoral Pain with Transcranial Direct Current Stimulation: Feasibility Exploration. 2025 APTA Combined Sections Meeting, Houston, February 13-15. Accepted.
6. Seekins M, Diez T, Mendez J, Contreras M, Bashford G, **Ho KY**, Liang JN. Morphological changes in the Achilles tendon in individuals chronically post-stroke. 2024 APTA Combined Sections Meeting, Boston, MA, USA, February 15-17, 2024.
7. Seekins M, Diez T, Mendez J, Contreras M, Bashford G**, Ho KY**, Liang JN. Characterizing Adaptations in Spinal Ia Afferent Loop Excitability and Achilles Tendon Morphology after Stroke. 2024 APTA Combined Sections Meeting, Boston, MA, USA, February 15-17, 2024.
8. **Ho KY**, Contreras M, Diez T, Mendez J, Seekins M, Liang JN, Bashford G. Morphological changes in the Achilles tendon in individuals chronically post-stroke. 3rd Tendon Summit, Los Angeles, CA, USA, September 9-10. 2023.
9. Roys C, **Ho KY**, Stopka D, Lum R, Souza T, Mann S, Hilgenkamp T. Effects of a 12-Week Remote Combined Exercise Program on Gait in Individuals with Down Syndrome. 2022 APTA Combined Sections Meeting, San Antonio, TX, USA, February 2-5, 2022.
10. Guerrero K, **Ho KY**, Umagat A, Martinez A, Barton M, T Mann S, Hilgenkamp T. The Effects of a Telehealth Exercise Intervention on Balance in Adults withDown Syndrome. 2022 APTA Combined Sections Meeting, San Antonio, TX, USA, February 2-5, 2022.
11. **Ho KY**, Barrett T, Clark Z, Fox T, DuVall C, Howden C. Does Decreased Trunk Flexion Contribute to Patellofemoral Joint Loading in Runners with Patellofemoral Pain? 2022 APTA Combined Sections Meeting, San Antonio, TX, USA, February 2-5, 2022.
12. **Ho KY**, Stone K. Asymmetries in Dynamic Valgus Index after Anterior Cruciate Ligament Reconstruction. 2021 APTA Combined Sections Meeting, February 1-28, 2021.
13. Liang JN, **Ho KY**, Arches J, Keohane M, Lee J, Simon A. Altering Somatosensory Input via Different Footwear to Improve Walking in People with Chronic Post-Stroke Hemiparesis. 2021 APTA Combined Sections Meeting, February 1-28, 2021.
14. Shih Y, Stone K, **Ho KY**. Lower Extremity Support Moment and Distribution of Joint Moments during Sloped Running. 2020 Annual American Society of Biomechanics Meeting, Atlanta, GA, USA, August 4-7, 2020.
15. Cummins A, Khuu C, Parker S, Shepherd S, **Ho KY**. Comparisons of Patellar Bone Mineral Density between Individuals with and without Patellofemoral Pain. 2020 APTA Combined Sections Meeting, Denver, CO, USA, February 12-15, 2020.

16. **Ho KY**, Cummins A, Khuu C, Parker S, Shepherd S. Comparisons of Patellar Bone Mineral Density between Individuals with and without Patellofemoral Pain. 6th International Patellofemoral Pain Syndrome Research Retreat, Milwaukee, Wisconsin, USA, October 1-3, 2019.
17. **Ho KY**, Lee SP, Evers M, Kellogg J, Teter K, Chang, Y, Bashford, G. Patellar Tendon Morphology in Trans-Tibial Amputees Utilizing a Prosthesis with a Patellar-Tendon-Bearing Feature. 3rd Tendon Summit, Los Angeles, CA, USA, May 5. 2019.
18. **Ho KY**, Lee SP, Evers M, Kellogg J, Teter K, Chang, Y, Bashford, G. Patellar Tendon Morphology in Trans-Tibial Amputees Utilizing a Prosthesis with a Patellar-Tendon-Bearing Feature. 2019 APTA Combined Sections Meeting, Washington, DC, USA, January 23-26, 2019.
19. Baquet A, **Ho KY**, Chang YJ, Fietzer A, Strassberg C, Evers M, Bashford G, Kulig K. 2D ultrasound-based characterization of Achilles tendon micromorphology in runners using spatial frequency parameters. 2018 American College of Sports Medicine Annual Meeting, Minneapolis, MN, USA, May 29 – June 2, 2018.
20. **Ho KY**, Turner C, Benson B, Nelson T. Reliability and validity of using a mobile application to assess knee motion in healthy and post-anterior cruciate ligament reconstruction subjects. 2018 APTA Combined Sections Meeting, New Orleans, LA, USA, February 21-24, 2018
21. **Ho KY**, French T, Klein B, Lee Y. Downhill running increases patellofemoral joint stress. 2018 APTA Combined Sections Meeting, New Orleans, LA, USA, February 21-24, 2018
22. Bagwell J, **Ho KY**, Powers C.M. Finite element analysis of the tibial tuberosity osteotomy with anteromedialization procedure for patella instability. 2017 Annual American Society of Biomechanics Meeting, Boulder, CO, USA, August 8-11, 2017.
23. **Ho KY**, Sudweeks S, McClaren J. Acute effects of walking on the deformation of femoral articular cartilage. 2017 APTA Combined Sections Meeting, San Antonio, TX, USA, February 15-18, 2017
24. **Ho KY**, Basar B, Hahn D, Javier C. Reliability of Measuring Anterior Translation of the Mandibular Condyle during Mouth Opening Using Ultrasonography. 2017 APTA Combined Sections Meeting, San Antonio, TX, USA, February 15-18, 2017
25. Standerfer A, Ngo S, Daun K, Lee SP, **Ho KY**. Locomotion-induced shock loading and tibiofemoral joint bone stress injury. 2016 APTA Combined Sections Meeting, Anaheim, California, USA, February 17-20, 2016
26. Epstein R, Garcia R, Riley N, Lee SP, Turner C, **Ho KY.** The effects of patellofemoral taping on patellofemoral joint alignment and contact area. 2016 APTA Combined Sections Meeting, Anaheim, California, USA, February 17-20, 2016
27. Epstein R, Garcia R, Riley N, Lee SP, Turner C, **Ho KY.** The effects of patellofemoral taping on patellofemoral joint alignment and contact area. 4th International Patellofemoral Pain Research Retreat, Manchester, UK, September 2-4, 2015.
28. Epstein R, Garcia R, Riley N, Lee SP, Turner C, **Ho KY**. The effects of patellofemoral taping on patellofemoral joint alignment and contact area. 2015 Kinesio Taping Association International Research Symposium, Tokyo, Japan, November 21-23, 2015.
29. **Ho KY**, Ho S. Physical therapy for ankylosis of temporomandibular joint: a case report. 2015 APTA Combined Sections Meeting, Indianapolis, Indiana, February 4-7, 2015.
30. **Ho KY**, Hu H.H., Colletti P.M., Powers C.M. Recreational runners with patellofemoral pain exhibit elevated patella water content. New Investigator Workshop on Advancing Arthritis Research, Pentagon City, VA, USA, April 6, 2014.
31. **Ho KY**, Hu H.H., Colletti P.M., Powers C.M. Recreational runners with patellofemoral pain exhibit elevated patella water content. 7th Annual Interdisciplinary Research & Scholarship Day, UNLV, Las Vegas, Nevada, April 21, 2014.

32. Liao TC**, Ho KY**, Farrokhi S, Powers CM. Comparison of patella and femur cartilage stress in healthy and symptomatic females. 3rd International Patellofemoral Pain Syndrome Research Retreat, Vancouver, Canada, September 18-19, 2013.
33. **Ho KY**, Hu H.H., Colletti P.M., Powers C.M. Recreational runners with patellofemoral pain exhibit elevated patella water content. 3rd International Patellofemoral Pain Syndrome Research Retreat, Vancouver, Canada, September 18-19, 2013.
34. **Ho KY**, Powers C.M. Comparison of patella bone strain between individuals with and without patellofemoral pain. 2012 Annual American Society of Biomechanics Meeting, Gainesville, FL, USA, August 15-18, 2012.
35. **Ho KY**, Hu H.H., Colletti P.M., Powers C.M. Patella water content and bone marrow lesions in individuals with patellofemoral pain: evaluation using water-fat MRI. ISMRM Scientific Workshop: Fat-Water Separation: Insights, Application & Progress in MRI, Long Beach, CA, USA: February 19-22, 2012.
36. **Ho KY**, Hu H.H., Nayak K.S., Colletti P.M., Powers C.M. The influence of running on patellar water content and bone marrow lesions in females with and without patellofemoral pain. 2nd International Patellofemoral Pain Syndrome Research Retreat, Ghent, Belgium, August 31- September 2, 2011.
37. Yang N.H., **Ho KY**, Farrokhi S., Powers C.M. Increase patella cartilage stress with internal femoral rotation: Evaluation Using Finite Element Analysis. 2nd International Patellofemoral Pain Syndrome Research Retreat, Ghent, Belgium, August 31- September 2, 2011.
38. Teng HL, **Ho KY**, Powers C.M. Utilizing a forward trunk lean during running decreases patellofemoral joint stress. 2nd International Patellofemoral Pain Syndrome Research Retreat, Ghent, Belgium, August 31- September 2, 2011.
39. **Ho KY**, Mokarram N., Yang N.H., Vaziri A., Powers C.M. Estimation of patella bone stress: a comparison of homogeneous and heterogeneous finite element models. 2011 Annual American Society of Biomechanics Meeting, Long Beach, CA, USA, August 10-13, 2011.
40. Yang N.H., **Ho KY**, Farrokhi S., Powers C.M. Increase patella cartilage stress with internal femoral rotation: Evaluation Using Finite Element Analysis. 2011 Annual American Society of Biomechanics Meeting, Long Beach, CA, USA, August 10-13, 2011.
41. Teng HL, **Ho KY**, Powers C.M. The influence of sagittal-plane trunk posture on patellofemoral joint stress during running. 2011 Annual American Society of Biomechanics Meeting, Long Beach, CA, USA, August 10-13, 2011.
42. **Ho KY**, Hu H.H., Keyak J.H., Colletti P.M., Powers C.M. Comparisons of bone density measurements between quantitative computed tomography and magnetic resonance IDEAL imaging. 19th Meeting of the International Society of Magnetic Resonance in Medicine, Montreal, Canada, May 7-13, 2011.
43. **Ho KY**, Yang N.H., Farrokhi S., Powers C.M. The influence of patella cartilage thickness on patella bone stress in females with and without patellofemoral pain. 2010 Annual American Society of Biomechanics Meeting, Providence, RI, USA, August 18-21, 2010.
44. Yang N.H., **Ho KY**, Farrokhi S., Powers C.M. Increase patellofemoral joint stress with internal femoral rotation: a finite element analysis. 2010 Annual American Society of Biomechanics Meeting, Providence, RI, USA, August 18-21, 2010.
45. **Ho KY**, Hu H.H., Nayak K.S., Colletti P.M., Powers C.M. The influence of running on patellar water content and bone marrow edema in females with and without patellofemoral pain. 18th Meeting of the International Society for Magnetic Resonance in Medicine, Stockholm, Sweden, May 1-7, 2010.
46. **Ho KY**, Chinkulprasert C, Blanchette M.G., Powers C.M. The influence of heel height on patellofemoral joint stress during walking. 2009 Gait and Clinical Movement Analysis Society Meeting, Denver, CO, USA, March 10-13, 2009.

47. **Ho KY**, Chen YJ, Farrokhi S., Souza R.B., Powers C.M. Patellofemoral joint stress during weightbearing and non-weightbearing exercises. 2009 Combined Sections Meeting of American Physical Therapy Association, Las Vegas, NV, USA, February 2-6, 2009.
48. **Ho KY**, Chen YJ, Farrokhi S., Souza R.B., Powers C.M. Patellofemoral joint stress during weightbearing and non-weightbearing exercises. Southern California Conference on Biomechanics, Thousand Oaks, CA, USA, April 11-12, 2008.
49. **Ho KY**, Hsu AT. Displacement of the head of humerus while performing "mobilization with movements" in glenohumeral joint. 2004 Annual Conference of Physical Therapy Association of the Republic of China, Taipei, Taiwan, September 25-26, 2004.

Book Chapters

1. Ho S, **Ho KY**. The Temporomandibular Joint: Evidence-Informed Physical Therapy Patient Management. Current Concepts of Physical Therapy, 5th Edition, Academy of Orthoapedic Physical Therapy, American Physical Therapy Association.

Non-Peer Reviewed Publications

1. **Ho KY**. Patellofemoral pain in runners, Taiwan Physical Therapists Association Journal, 54, 2004.
2. **Ho KY**. Exercise performance in patients with end-stage heart failure after implantation of a left ventricular assist device and after heart transplantation, Taiwan Physical Therapists Association Journal, 25, 2002.

Non-Peer Reviewed Presentations

1. "Application of Medical Imaging in Physical Therapy Research" Department of Physical Therapy, National Cheng Kung University -5/2021 (2 hour presentation)
2. "The Influence of Mechanical Loading on Bone Injury and Bone Water Content of the Knee Joint" School of Nursing Brown Bag Lunch Session, University of Nevada, Las Vegas- 3/2015 (1 hour presentation)
3. "The influence of patellofemoral joint loading on patella strain and patella water content in female runners with patellofemoral pain: mechanisms, findings, and clinical implications" Lambda Kappa Delta Pre-Physical Therapy Honor Society, University of Nevada, Las Vegas- 11/2013 (1 hour presentation)
4. "The Influence of Patellofemoral Joint Loading on Patella Strain and Patella Water Content in Females with Patellofemoral Pain" Ho Physical Therapy, Beverly Hills, California -6/2013 (1 hour presentation)
5. "The Influence of patellofemoral joint loading on patella stress, patella water content, and bone marrow lesions in individuals with patellofemoral pain" Department of Physical Therapy, National Yang Ming University, Taipei, Taiwan- 12/2012 (1 hour presentation)

Funded/In Review Grant Activity

- Keefer I, Smith D, Yawn B, Liang JN, **Ho KY.** Test-Retest Reliability and Minimal Detectable Change for Various Frontal Plane Projection Angles during Dynamic Tasks in Persons With Patellofemoral Pain. UNLVPT Student Opportunity Research Grant 2023. $ 120
- Lucero P, Dyer S, Kiraly S, Malabanan J, **Ho KY**, Hilgenkamp T. Effects of a 12-Week Multidimensional Physical Therapy Based Exercise Intervention on Gait in Adults with Down Syndrome. UNLVPT Student Opportunity Research Grant 2023. $ 150
- Bernal J, Son H, **Ho KY**, Hilgenkamp T. Effect of Exercise on Balance in Adults with Down. Syndrome UNLVPT Student Opportunity Research Grant 2023. $ 150

- Carpio M, Donohue J, Kissman J, Liang JN, **Ho KY**. Comparisons of the Central Activation of the Gluteal Muscles between Individuals With and Without Patellofemoral Pain. UNLVPT Student Opportunity Research Grant 2022. $ 2,498
- Casillas D, Ruiz L, **Ho KY**, Liang JN. Effects of altered somatosensory input on gait kinetics and kinematics via different footwear in individuals with chronic post-stroke hemiparesis. UNLVPT Student Opportunity Research Grant 2022. $ 2,565
- Broadwell B, Wallace C, Aquino J, Whimple M, Liang JN, **Ho KY**. Modulating cortical excitability to improve functional movements in individuals with patellofemoral pain: a randomized controlled trial. UNLVPT Student Opportunity Research Grant 2021. $ 2,004
- Contreras M, Diez T, Mendez J, Seekins M, **Ho KY**, Liang JN. A comparison of individuals with chronically post-stroke and health controls on neural spinal circuit function and mechanical Achilles tendon adaptations. UNLVPT Student Opportunity Research Grant 2021. $ 1,757.
- Cadiao S, Kotake K, Prudencio J, Tuazon N**, Ho KY**, Hilgenkamp T. The Effects of Training on Balance in Individuals with Down Syndrome. UNLVPT Student Opportunity Research Grant 2021. $ 1,577
- Anna Lois Aquino, Sandra Daugherty, Alex Palko, **Ho KY**, Hilgenkamp T. The Effects of Exercise Training on Gait in Adults with Down Syndrome. UNLVPT Student Opportunity Research Grant 2021. $ 2,142
- Budge S, Madriaga A, Meske K, Nguyenton D, Liang JN, Ho KY. How does patellofemoral pain affect the functioning of the brain and spinal cord? A systematic review with meta-analysis. UNLVPT Student Opportunity Research Grant 2020. $4,340
- Barton M, Guerrero K, Martinez A, Umagat A, **Ho KY**, Hilgenkamp T. Balance in Individuals with Down syndrome. UNLVPT Student Opportunity Research Grant 2020. $250
- Lum R, Roys C, Souza T, Stopka D, **Ho KY**, Hilgenkamp T. Examining the effects of a 12-week exercise program on gait in adults with Down syndrome. UNLVPT Student Opportunity Research Grant 2020. $250
- Clark Z, Fox T, DuVall C, Howden C, Barrett T, **Ho KY**. Is a decreased trunk flexion angle a contributing factor to increased patellofemoral joint loading in runners with patellofemoral pain? UNLVPT Student Opportunity Research Grant 2019. $4,288
- Arches J, Keohane M, Lee J, Simon A, **Ho KY**, Liang JN. Effects of altered somatosensory input on lower limb mechanics via different shoes and barefoot walking in individuals with chronic post-stroke hemiparesis. UNLVPT Student Opportunity Research Grant 2019. $4,865
- **Ho KY**, Lee D, Lee SP. Knee Pain, Tendon Degeneration, and Limb-Socket Dynamics in Trans-Tibial Amputees. UNLV Faculty Opportunity Award. 2018. $ 19,999.
- Liang JN, Kinney J, **Ho KY**, Shan G. Modifying the spinal circuitry to improve walking in individuals post-stroke. UNLV Faculty Opportunity Award. 2018. $ 20,000.
- Cummins C, Khuu C, Parker S, Shepherd S, **Ho KY**. Comparisons of Patellar Bone Mineral Density between Individuals with and without Patellofemoral Pain. UNLVPT Student Opportunity Research Grant 2018. $4,100
- Hung V, Reilly A, Wood R, Yuskov N, **Ho KY,** Liang JN. Effects of Foot Tactile Stimuli on Propulsion Force, Ankle Kinematics, and Muscle Activations in Patients with Chronic Post-Stroke Hemiparesis. UNLVPT Student Opportunity Research Grant 2018. $2,000
- Evers M, Kellogg J, McQueary K, Lee SP, **Ho KY**. Patellar tendon morphology in trans-tibial amputees utilizing a patellar-tendon-bearing prosthesis. UNLVPT Student Opportunity Research Grant 2017. $580
- Ackley C, Aki K, Arias J, Trinh J, **Ho KY**, Liang JN. Effects of altering walking speed on propulsion force, ankle kinematics, and muscle activations in patients with chronic post-stroke hemiparesis. UNLVPT Student Opportunity Research Grant 2017. $1,880

- French T, Klein B, Lee Y, **Ho KY**. Patellofemoral Joint Stress during Uphill and Downhill Running. UNLVPT Student Opportunity Research Grant 2016. $720
- Benson B, Nelson T, Turner T, **Ho KY**. The reliability and validity of using a mobile application to assess knee motion in healthy and post-anterior cruciate ligament reconstruction subjects. UNLVPT Student Opportunity Research Grant 2016. $1,340
- Basar B, Hahn D, Javier C, Puentedura E, Mah J, **Ho KY**. Measurement of the temporomandibular joint arthrokinematics by ultrasound and magnetic resonance imaging: a reliability and validity study. UNLVPT Student Opportunity Research Grant 2015. $3,000
- Javier C, **Ho KY**. Measurement of the temporomandibular joint arthrokinematics by ultrasound and magnetic resonance imaging: a reliability and validity study. UNLV Graduate & Professional Student Association Research Grant 2015. $ 950
- McClaren J, Sudweeks S, **Ho KY**. Acute effects of walking on the deformation of femoral articular cartilage of the knee. UNLVPT Student Opportunity Research Grant 2015. $2,125
- Sudweeks S, **Ho KY**. Acute effects of walking on the deformation of femoral articular cartilage of the knee. UNLV Graduate & Professional Student Association Research Grant 2015. $800
- **Ho KY**, SP Lee, Turner C, Madsen S. The effects of patellofemoral taping on patellofemoral joint alignment and contact area. UNLV Faculty Opportunity Award. 2014. $ 20,098
- Epstein R, Garcia R, Riley N, **Ho KY.** The effects of patellofemoral taping on patellofemoral joint alignment and contact area. UNLVPT Student Opportunity Research Grant 2014. $4,941
- Daun K, Ngo S, Standerfer A, **Ho KY**. The Effects of locomotion-induced shock loading on tibiofemoral bone stress injury. UNLVPT Student Opportunity Research Grant 2014. $4,100
- Standerfer A, Ho KY. The Effects of Locomotion-induced shock loading on tibiofemoral bone stress injury. UNLV Graduate & Professional Student Association Research Grant 2014. $ 800
- **Ho KY.** The influence of patellofemoral joint loading on patella bone stress, patella water content, and bone marrow lesions in individuals with patellofemoral pain. ISB Student Dissertation Grant. 2011. $ 5,000.
- **Ho KY.** The influence of patellofemoral joint loading on patella bone stress, patella water content, and bone marrow lesions in individuals with patellofemoral pain. USC 3.0 T MRI Pilot Research Grant. 2011. $ 6,000.

Current/Active Research Activity

- Carpio M, Donohue J, Kissman J, Liang JN, **Ho KY**. Comparisons of the Central Activation of the Gluteal Muscles between Individuals With and Without Patellofemoral Pain, data collection stage
- Bernal J, Son H, Cadiao S, Kotake K, Prudencio J, Tuazon N, **Ho KY**, Hilgenkamp T. Balance in Individuals with Down syndrome, data collection stage
- Lucero P, Dyer S, Kiraly S, Malabanan J, Aquino AL, Daugherty S, Palko A, **Ho KY**, Hilgenkamp T. Gait in adults with Down syndrome, data collection stage
- Casillas D, Ruiz L, Arches J, Keohane M, Lee J, Simon A, **Ho KY**, Liang JN. Effects of altered somatosensory input on lower limb mechanics via different shoes and barefoot walking in individuals with chronic post-stroke hemiparesis, data collection stage
- Contreras M, Diez T, Mendez J, Seekins M, **Ho KY**, Liang JN. A comparison of spinal reflex function and morphological adaptations of the Achilles tendon between individuals chronically post-stroke and healthy controls, writing stage
- Broadwell B, Wallace C, Aquino J, Whimple M, Liang JN, **Ho KY**. Modulating cortical excitability to improve functional movements in individuals with patellofemoral pain: a randomized controlled trial, writing stage
- Bagwell JJ, **Ho KY,** Powers CM. Finite element analysis of the tibial tuberosity anteromedialization procedure for patella instability, writing stage

Membership in Scientific/Professional Organizations

- Member American Physical Therapy Association (2012 to present)
    - Member Orthopedic Section of American Physical Therapy Association (2014 to present)
    - Member Research Section of American Physical Therapy Association (2018 to present)
- Member American Society of Biomechanics (2010 to present)
- Member International Society of Biomechanics (2009 to present)
- Member International Society of Magnetic Resonance in Medicine (2010 to 2020)

Consultative and Advisory Positions

- Editorial Board
    - BMC Musculoskeletal Disorders (2023 to present)
- Manuscript Reviewer
    - Journal of Sports Science and Medicine (2023)
    - Journal of Orthopaedic & Sports Physical Therapy (2012 to 2022)
    - Magnetic Resonance in Medicine (2014 to 2016)
    - BioMedical Engineering OnLine (2014)
    - GeoScience (2016)
    - BMC Musculoskeletal Disorders (2017)
    - The Knee (2017 to present)
    - Complementary Therapies in Clinical Practice (2018)
    - Physical Therapy in Sport (2018)
    - Scientific Reports (2019)
    - Brazilian Journal of Physical Therapy (2019)
    - Scandinavian Journal of Medicine & Science in Sports (2021)
    - Plos One (2021)

- Committee Member
    - Subcommittee on Trainee Stipends, International Society of Magnetic Resonance in Medicine (2018 to 2020)

Community Service

- None

Services to the University/School/Department on Committees/Councils/Commissions

- Department of Physical Therapy
    - Member- Academic Review Committee (2018 to 2020, 2022 to present)
    - Member- Program Assessment Committee (2013 to 2019, 2022 to present)
    - Member- PhD Program Committee (2022 to present)
    - Member- Ad Hoc T&P Committee (2020 to present)
    - Chair- Media Committee (2015 to 2021)
    - Member- Bylaws Committee (2019 to 2021)
    - Member- Scholarship Committee (2019 to 2021)
    - Chair- Ad Hoc Search Committee (2019)
    - Member- Ad Hoc Search Committee (2017)
    - Chair- Bylaws Committee (2013 to 2015)
    - Member- Ad Hoc Search Committee (2014 to 2015)
- School of Integrated Health Sciences

- Member-Faculty Appeal Committee (2023 to present)
- Member-Faculty Review Committee (2021 to 2023)
- Member-Faculty Appeals Committee (2019 to 2021)
- Member- Academic Standards Committee (2015 to 2017)
- Member- Bylaws Committee (2013 to 2015)

- University of Nevada, Las Vegas
  - Member- Graduate Awards Committee (2023 to present)
  - Member- Graduate College Dean Search Committee (2022)
  - Member- Top Tier Grad Enrollment Management (GEM) Advisory Board/Working Group (2021)
  - Member- Top Tier Graduate Faculty and Student Committee (2019 to 2020)
  - Member- Research Week Planning Committee (2019 to 2020)
  - Member- Top Tier Doctoral Graduate Research Assistant (TTDGRA) Review Committee (2019)
  - Member- Faculty Development Leave Committee (2016)

Honors and Awards

- 2023 National Cheng Kung University, College of Medicine, Distinguished Alumna Award
- 2023 UNLV Faculty Travel Award
- 2021 UNLV Faculty Travel Award
- 2019 UNLV Faculty Travel Award
- 2018 UNLV Faculty Travel Award
- 2018 UNLV Faculty Opportunity Award
- 2017 UNLV Faculty Travel Award
- 2017 APTA CSM AOPT Poster Award Finalist
- 2016 UNLV Faculty Travel Award
- 2016 Magnetic Resonance in Medicine (MRM) Distinguished Reviewer
- 2016 School of Allied Health Sciences Distinguished Teaching Award
- 2015 Magnetic Resonance in Medicine (MRM) Distinguished Reviewer
- 2015 UNLV Faculty Travel Award
- 2014 UNLV Faculty Opportunity Award
- 2014 UNLV Faculty Travel Award
- Faculty Award 1st Place, 2014 UNLV 7th Annual Interdisciplinary Research Scholarship Day, Division of Health Science.
- New Investigator Award of 2014 Advancing Arthritis Research, National NIDRR Arthritis Rehabilitation Research and Training Center
- 2010-2011 Studying Abroad Scholarship, Ministry of Education, Taiwan
- 2011 ISMRM Educational Stipend
- 2010 USC Graduate and Professional Student Senate Travel Award

Continuing Education Attended

- American Physical Therapy Association Combined Sections Meeting, March 15- April 15, 2023 – 12 hours
- American Physical Therapy Association Combined Sections Meeting, February 1- March 31, 2021 – 20 hours
- Orthopedic Conditions in Pediatrics: A Primer for Physical Therapy Professionals (PHYSICALTHERAPY.com), May 29, 2020 – 2.5 hours
- Using Imaging to Your Advantage: The Upper Extremity and Differential Diagnosis (PHYSICALTHERAPY.com), May 28, 2020 – 2 hours

- American Physical Therapy Association Combined Sections Meeting, New Orleans, LA, USA, February 22-25, 2018 – 19 hours
- American Physical Therapy Association Combined Sections Meeting, San Antonio, TX, USA, February 15-18, 2017 – 19 hours
- Evidence-Based Examination of the Hip (MedBridge, Inc), August 12-15, 2016 – 6.7 hours
- Evidence-Based Treatment of the Knee and Thigh (MedBridge, Inc), August 9-12, 2016 – 3 hours
- Evidence-Based Examination of the Knee and Thigh (MedBridge, Inc), August 8-9, 2016 – 6.5 hours
- Hip Fracture Part A: Overview, Classifications, and Evidence (MedBridge, Inc), July 7, 2016 – 1 hour
- Basic Musculoskeletal Radiology and Imaging (MedBridge, Inc), July 6-7, 2016 – 4 hours
- American Physical Therapy Association Combined Sections Meeting, Indianapolis, IN, February 4-7, 2015 – 26 hours
- CAPTE Self-Study Workshop, Indianapolis, IN, February 3-4, 2015
- Spinning Beyond Basics - An Advanced Vestibular Rehabilitation Course, Las Vegas, NV, September 20-21, 2014- 15 hours
- 2014 Arthritis State of the Science Meeting, Pentagon City, VA, USA, April 7, 2014- 6.5 hours
- New Investigator Workshop on Advancing Arthritis Research, Pentagon City, VA, USA, April 6, 2014- 3.75 hours
- Pelvic Health Level I, APTA Section of Women's Health, Houston, Texas, USA, March 21-23, 2014- 23 hours
- American Physical Therapy Association Combined Sections Meeting, Las Vegas, Nevada, February 4-6, 2014 – 26 hours
- CAPTE Self-Study Workshop, Las Vegas, NV, February 2-3, 2014
- Team Concept Conference, Sports Physical Therapy Section of the APTA, Las Vegas, NV, December 5-7, 2013, 18.5 hours
- The Dizzy and Imbalanced Patient: Differential Diagnosis, Examination and Treatment, CPTA, Santa Barbara, CA, October 26, 2013- 7.5 hours

Current Teaching Responsibilities in the Entry-Level DPT program

- Fall:
    - DPT 741 (Musculoskeletal I- 3 credits)
- Spring:
    - DPT 758 (Diagnostic Imaging and Testing -2 credits)

Current Teaching Responsibilities in the PhD program

- Spring:
    - PTS 715 (Pathobiomechanics- 3 credits)

Graduate Students Supervised

- **PhD Students, Committee Chair**
    - Michelle Samuel (2018-2019) Interdisciplinary Health Science – Rehabilitation Sciences
    - Hiraku Nagahori (2024-current) Interdisciplinary Health Science
- **PhD Students, Committee Member**
    - Kevin Choe (2018-2021) Interdisciplinary Health Science – Biomechanics
    - Leonard Ubalde (2020-2021) Neuroscience
    - Jay Ciccotelli (2018-2023) Interdisciplinary Health Science – Rehabilitation Sciences
    - Haehyun Lee (2024-current) Interdisciplinary Health Science

- **Doctor of Physical Therapy Students, Professional Career and Academic Advisor**

- Class of 2016: Kasha Farley, Derek Oldroyd, Ryan Zane
- Class of 2017: Casey Gray, Bradley Klemetson, Diana Scott, Kaylee Waters
- Class of 2018: Vincent Dinglassan, Jesse Kim, Danielle Salgo
- Class of 2019: Stephen Elmer, Samantha Johnson, Tyler Ormsby
- Class of 2020: Allina Cummins, Chris Khuu, Jeremy Nordfelt, James Tingey, Ryan Yim
- Class of 2021: Matthew Tillitt, Branden Waters, Collin Weber
- Class of 2022: Sarah Partridge, Daniel Perez, Jessie Peterson, Christopher Roys
- Class of 2023: Justin Rasavage, Isabella Russell, Alan Savanapridi
- Class of 2024: Edgar Armengual, Jasmine Puspos, Taylor DeRose, Jolena Sagaya
- Class of 2025 (current): Diana Nguyen, Dong Hui Kim, Jer Ja Chuang
- Class of 2026 (current): Joshua Yu, Ramyr Bognot, Amanda Robles, Ani Gasparyan
- Class of 2027 (current): Celeste Bonifacio, Megann Williams, Michael Goldstein, Kayla De Guzman

- **Doctor of Physical Therapy Students, Research Mentor**
  - Class of 2016: Karen Daun, Ryan Epstein, Ron Garcia, Suzenna Ngo, Nicole Riley, Alexa Standerfer
  - Class of 2017: Danielle Hahn, Christensen Hardy, Brooke Laskowski, Jayson McClaren, Skyler Sudweeks
  - Class of 2018: Brenda Benson, Theresa French, Brooks Klein, Young Lee, Tyrel Nelson
  - Class of 2019: Corey Ackley, Kiley Aki, Joshua Arias, Michelle Evers, Jessica Kellogg, Kelly McQueary, Jassie Trinh
  - Class of 2020: Allina Cummins, Victor Hung, Chris Khuu, Shane Parker, Amanda Reilly, Steven Shepherd, Rachel Wood, Nikita Yuskov
  - Class of 2021: Tavin Fox, Zachary Clark, Christine DuVall, Caitlin Howden, Jed Lee, Megan Keohane, Jynelle Arches, Aaron Simon
  - Class of 2022: Christopher Roys, Taylor Souza, Daniel Stopka, Robert Lum, Andrew Martinez, Mark Barton, Alexandria Umagat, Kristina Gutierrez, Savanna Budge, Kara Meske, Austin Madriaga, Derrick Nguyenton
  - Class of 2023: Anna Lois Aquino, Sandra Daugherty, Alex Palko, Sherwin Cadiao, Kayla Kotake, Jayston Prudencio, Nicole Tuazon
  - Class of 2024: Bryce Broadwell, Connan Wallace, Makenzie Whimple, Jeno Aquino, Migi Contreras, Trevor Diez, Johanna Mendez, Mira Seekins
  - Class of 2025 (current): Michael Carpio, John Donohue, Jacob Kissman, Daniela Casillas, Lesley Ruiz
  - Class of 2026 (current): Isabella Keefer, Brendan Yawn, Derrick Smith, Juan Bernal, Paige Lucero, Samantha Dyer, Stephen Kiraly, James Malabanan
  - Class of 2027 (current): Logan Pine, Gregory Decarlo, Juana Flores, Jacob Preciado, Lorizen Santos, Lyndsey Marino

- **School of Medicine Students, Research Mentor**
  - Class of 2021: Jenny Hong, Alex Lin, and Johnnie Woodson

- **Graduate Assistant/Teaching Assistant Advisor**
  - 2013-2014: Trevor Mahoney
  - 2014-2015: Alexa Standerfer
  - 2015-2016: Kris Raines
  - 2016-2017: Brooks Klein

- 2017-2018: Michelle Evers
- 2018-2019: Allina Cummins; Daniel Krist
- 2019-2020: Kathleen Stone
- 2020-2021: Andrew Murata
- 2021-2022: Billy La
- 2022-2023: Payton Mack
- 2024-current: Paige Lucero; Hiraku Nagahori

- **Master's Degree Student, Committee Member**
  - En-Chung Shih (2015) Health Physics
  - Samantha Reynolds (2016) Kinesiology
  - Julien Mihy (2020) Kinesiology
  - Brenna Barrios (2021): Kinesiology