**Szu-Ping Lee, PT, PhD**

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**EDUCATION**

* **Ph.D. Biokinesiology** (2008-2012) University of Southern California, Los Angeles, California, USA

*Dissertation:* The Influence of Hip Muscle Performance on Postural Stability & Ankle Joint Biomechanics: Implications for Ankle Injury

*Advisor:* Christopher Powers

*GPA*: 3.8/4.0

* **M.S. Human Performance/Biomechanics** (2004-2005). University of Florida, Gainesville, Florida, USA

*Research focus:* Persons with Reconstructed ACL Exhibit Altered Knee Mechanics during High-Speed Maneuvers

*Advisor:* John Chow

*GPA:* 3.8/4.0

* **B.S. Physical Therapy** (1997-2001). National Yang-Ming University, Taipei, Taiwan  
  *GPA*: 3.7/4.0

**WORK EXPERIENCE**

* **ASSISTANT PROFESSOR** (2012-CURRENT)Department of Physical Therapy, University of Nevada, Las Vegas, Nevada, USA  
  Responsibilities: instruction and research in a Doctor of Physical Therapy program  
  Instruction experience:

Exercise Physiology   
Exercise Physiology Laboratory   
Applied Research Statistics

Clinical Research in Physical Therapy

Physical Agents & Electrophysiology

Prosthetics & Orthotics

Evidence-Based Practice in Physical Therapy

* **POST-DOCTORAL FELLOW** (2012/8-2012/12)Department of Physical Therapy, University of Nevada, Las Vegas, Nevada, USA  
  Responsibilities: instruction and research in a Doctor of Physical Therapy program
* **Teaching Assistant** (2008-2012)

Division of Biokinesiology and Physical Therapy, University of Southern California, Los Angeles, California, USA

Responsibilities: instruction in a Doctor of Physical Therapy program

Analytical Anatomy

Clinical Management of Cardiopulmonary Dysfunction

Clinical Electrophysiology

Physical Agents in Physical Therapy

* **Teaching Assistant** (2005-2007)

Department of Applied Physiology and Kinesiology, University of Florida, Gainesville, Florida, USA

Responsibilities: assist in teaching the following course:

Applied Anatomy

* **Physical Therapist** (2002-2004)

Department of Rehabilitation, Taiwan Adventist Hospital, Taipei, Taiwan   
Responsibilities: orthopedic and neurological physical therapy

* **Lecturer** (2002-2004)

Postpartum Care Center in Taiwan Adventist Hospital, Taipei, Taiwan  
Responsibilities: lecture –Postpartum Back-Pain Prevention Exercise Program

* **Executive Assistant** (1999)

Department of Medical Instrumentation, Minnesota Mining and Manufacturing (3M) – Taiwan Branch, Taipei, Taiwan

**PUBLICATIONS**

* **Refereed Articles**
  1. **Lee SP**, Souza RB, Powers CM. The [Influence of Hip Abductor Muscle Performance on Dynamic Postural Stability in Females with Patellofemoral Pain.](http://pt2.usc.edu/labs/mbrl/pdfs/Hwang2002.pdf) *Gait & Posture;* 2012;36(3): 425-429.
  2. **Lee SP** &Powers CM.Description of a Weight Bearing Method to Assess Hip Abductor & External Rotator Muscle Performance. *Journal of Orthopaedic and Sports Physical Therapy;* 2013; 43(6): 392-397*.*
  3. **Lee SP** & Powers CM**.** Hip Abductor Fatigue Results in Increased Medial-Lateral Center of Pressure Excursion & Neuromuscular Adaptation of Peroneus Longus during a Unipedal Landing Task.*Clinical Biomechanics*; 2013; 28:524-529.
  4. **Lee SP** & Powers CM.Individuals with Diminished Hip Abductor Muscle Strength Exhibit Altered Ankle Biomechanics & Neuromuscular Activation during Unipedal Balance Tasks. *Gait & Posture;* 2014; 39(3): 933-938.
  5. **Lee SP**, Chow JW, Tillman MD. Persons with Reconstructed ACL Exhibit Altered Knee Mechanics during High-Speed Maneuvers. Accepted *International journal of Sports Medicine*. In press
* **Refereed Articles in Review**
  1. Hickman R, Dufek JS, **Lee SP**, Blahovec A, Kuiken A, Riggins H, McClellan J. Feasibility of Using a Large Amplitude Movement Therapy to Improve Ambulatory Function in Children with Cerebral Palsy. *Physiotherapy Theory and Practice.*
  2. Kulig K, **Lee SP,** Noceti-Dewit L, Reischl S. Individuals with Tibialis Posterior Tendon Dysfunction Exhibit Diminished Ability to Perform a Unipedal Standing Balance Task (*Foot and Ankle International*)
* **Refereed Articles in Preparation**
  1. **Lee SP**, Contreras D, Denton D, Young J.Application of a Criterion-Based Timed Up-and-Go Test: a Reliability and Validity Study ([*Journal of*](http://www.springerlink.com/content/104900/) *Gerontology: Medical Science;* Projected submission April 2014*)*
* **Conference papers**
  1. **Lee SP**, Noceti-Dewit L, Reischl S, Kulig K. Individuals with Posterior Tibial Tendon Dysfunction Exhibit Diminished Ability in Maintaining Postural Stability during a Unipedal Balance Task Proceedings of the America Physical Therapy Association Combined Sections Meeting, Las Vegas, Nevada, USA, 2014
  2. **Lee SP**, Contreras D, Denton D, Young J.Application of a Criterion-Based Timed Up-and-Go Test: a Reliability and Validity Study Proceedings of the 2013 Annual Meeting of The Gerontological Society of America, New Orleans, Louisiana, USA, 2013.
  3. **Lee SP** & Powers CM. Individuals with Diminished Hip Abductor Muscle Strength Exhibit Higher Moments & Neuromuscular Activation at the Ankle during Unipedal Balance Tasks. Proceedings of the 2012 Annual Meeting of American Society of Biomechanics, Gainesville, Florida, USA, 2012.
  4. Dorman JC, **Lee SP**,Munce TA, Thompson PA. Does a Dehydrating Bout of Intermittent Exercise Affect Peak Loading Rate during Landing in Adolescent Boys? Proceedings of the American College of Sports Medicine Annual Meeting, San Francisco, California, USA, 2012.
  5. **Lee SP** & Powers CM. Construct Validity and Reliability of a Novel Method to Assess Hip Abductor Muscle Performance. Proceedings of the America Physical Therapy Association Combined Sections Meeting, Chicago, Illinois, USA, 2012.
  6. **Lee SP** &Powers CM. Association between Functional Hip Abductor Strength and Hip Joint Kinematics and Kinetics During a Dynamic Uni-pedal Drop Landing Task. Proceedings of the 2011 Annual Meeting of American Society of Biomechanics, Long Beach, California, USA, 2011.
  7. **Lee SP** &Powers CM. Prediction of Frontal Plane Hip & Ankle Kinematics during Uni-pedal Stance Using a Dual-Segment, Center of Pressure-Based Postural Model. Proceedings of the 2011 Annual Meeting of American Society of Biomechanics, Long Beach, California, USA, 2011.
  8. Sutton KR, Armour Smith, J,  Jarvis DN, Oki KC, **Lee SP**, Kulig K. The Relationship between Long Bone Morphology, Dance History and Turnout: an Exploratory Study. Proceedings of the Annual Meeting of International Association for Dance Medicine and Science, Washington, DC, October 2011.
  9. Dorman JC, **Lee SP**, Calsbeek DJ, Esposito LM, Munce TA, Thompson PA, Powers CM and Bergeron MF F. Postural Stability in Adolescent Boys During Repeated Bouts of Intermittent Exercise in the Heat. Proceedings of 2011 Annual Meeting of American College of Sports Medicine, Denver, Colorado, USA 2011.
  10. Leung K, **Lee SP**, Popovich JM Jr., Reischl SF, Kulig K. A Comprehensive Foot, Ankle, and Hip Intervention for Patients with Posterior Tibial Tendon Dysfunction: A Case Series. Proceedings of the America Physical Therapy Association Combined Sections Meeting, New Orleans, Louisiana, USA, 2011.
  11. Powers CM, Pollard CD, **Lee SP**, Cesar G., Sigward SM. The Influence of Sex and Maturation on Knee Valgus Moments during Cutting: Implications for ACL Injury. Proceedings of the 2010 Annual Meeting of American Society of Biomechanics, Providence, Rhode Island, USA, 2010.
  12. Sigward SM, Pollard C, Cheng WC, **Lee SP**, Powers CM. The Influence of Gender & Maturation on Landing Strategies: Implications for ACL Injury. Proceedings of the 2009 Annual Meeting of American Society of Biomechanics, State College, Pennsylvania, USA, 2009.
  13. **Lee SP** & Powers CM. Does Diminished Hip Muscle Strength Influence Medial-lateral Dynamic Stability in Females with Patellofemoral Pain? Proceedings of the 2009 American Physical Therapy Association Combined Sections Meeting, Las Vegas, Nevada, USA, 2009.
  14. **Lee SP**, Chow JW, Tillman MD. The Effect of Leg Dominance on Knee Joint Kinetics during Cutting. Proceedings of the 2008 North America Congress on Biomechanics, Ann Arbor, Michigan, USA, 2008.
  15. **Lee SP**, Chow JW, Tillman MD, Bonhomme CA. Knee Kinetics during Cutting Maneuvers and ACL Laxity in Individuals with Unilateral ACL-reconstructed Knee. (Abstract) Medicine and Science in Sports & Exercise, 39(5), 2007.
  16. **Lee SP**, Chow JW, Tillman MD, Bonhomme CA. The Effects of Different Cutting Conditions, Leg Dominance and Measured Anterior Cruciate Ligament Laxity on Knee Joint Kinetics. Proceedings of the 21st Congress of the International Society of Biomechanics, Taipei, Taiwan, 2007.
  17. Chow JW, **Lee SP**, Tillman MD. Transverse Plane Moments and Ranges of Motion of the Lower Extremity during Walking and Turning in Unilateral Total Knee Replacement Individuals. Proceedings of the 21st Congress of the International Society of Biomechanics, Taipei, Taiwan, 2007

**REARCH FUNDING**

1. **Lee SP**. Influence of Foot Strike Pattern on Lower Back Muscle Activation during Running: Clinical Implications for Preventing Lower Back Pain in Runners. Faculty Opportunity Award, University of Nevada, Las Vegas, $24,268, 2013-2014.
2. **Lee SP**, Contreras D, Denton D. Examination of Test Condition Variables on the Test-Retest Reliability of the Timed Up-and -Go Test in Geriatric Population. Nevada INBRE; Idea Network of Biomedical Research Excellence, $11,000, 2013.
3. **Lee SP**, Joyce T, Brown D, Barton S. Influence of Foot Strike Pattern on Lower Back Muscle Activation during Running: Clinical Implications for Preventing Lower Back Pain in Runners. UNLV Department of Physical Therapy Student Research Opportunity Grant, $3,210, 2013.
4. **Lee SP**, Bair B, Gama M, Matteucci M.Musculoskeletal Symptoms of Neck and Shoulder in Users of Touch-screen Devices: A Survey Study. UNLV Department of Physical Therapy Student Research Opportunity Grant, $2,500, 2013.
5. Hickman, R., Dufek, J.S. and **Lee SP**. UNLV Kids Research Outreach to Community Clinicians (UNLV KidsROCC). School of Allied Health Sciences, University of Nevada, Las Vegas, $2,554, 2012-2013.
6. **Lee SP**. The Influence of Hip Muscle Performance on Postural Stability & Ankle Biomechanics: Implications for Ankle Injury. Dissertation Award, International Society of Biomechanics, $5000, 2011-2012.

**REVIEWER**

* *Journal of Orthopedic & Sports Physical Therapy*
* *International Research Journal of Medicine and Medical Science*

**PROFESSIONAL MEMBERSHIPS**

* American Physical Therapy Association (2008-current)
* American Society of Biomechanics (2006-current)
* Gerontological Society of America (2013-current)

**ACADEMIC AWARDS**

* International Society of Biomechanics (ISB) Dissertation Award, 2011
* Musculoskeletal Biomechanics Biokinesiology and Physical Therapy Award 2nd place, University of Southern California Research Day, 2009
* Most Innovative Award finalist, presented by the USC Stevens Institute for Innovation, University of Southern California Herman-Ostrow School of Dentistry, 2010.
* Young Investigator Award 3rd place, 21st Congress of the International Society of Biomechanics, Taipei, Taiwan, 2007
* Norma Leavitt Fellowship, University of Florida, College of Health and Human Performance, 2005
* Taiwan Ministry of Education Advanced Study-Abroad Scholarship, 2004-2007