

Curriculum Vitae

SZU-HUA (TERESA) CHEN

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EDUCATION

- Anticipated in 2019** **Ph.D. Candidate in Human Physiology, University of Oregon (GPA: 4.02)**
 Emphases: Biomechanics, Motion Analysis, Balance Control, Neuromechanics
 Chair: Li-Shan Chou, Ph.D.
- 2012** **M.S. in Physical Therapy, National Taiwan University (GPA: 3.96)**
 Emphases: Orthopedic Rehabilitation, Sports Physical Therapy, Ultrasonography
 Advisors: Huei-Ming Chai, Ph.D., PT & Shwu-Fen Wang, Ph.D., PT
- 2010** **B.S. in Physical Therapy, National Taiwan University (GPA: 4.00)**

GRANT

- Awarded**
 2017 Professional Training Opportunities Program, *Northwest Center for Occupational Health and Safety* (Principal Investigator) **\$5,805**
- Not awarded
 2018 The DLF Research Scholarship, *The De Luca Foundation* (Principal Investigator) **\$15,000**

AWARD, HONORS, SCHOLARSHIP

- 2019 Ursula (Sue) Moshberger Scholarship, *Department of Human Physiology, University of Oregon*
- 2018 Ursula (Sue) Moshberger Scholarship, *Department of Human Physiology, University of Oregon*
- 2018 Outstanding Reviewer, *Gait & Posture*
- 2017 Student Travel Award, *ACSM Biomechanics Interest Group*
- 2016-2018 Government Fellowship for Studying Abroad, *Ministry of Education, Taiwan (\$16,000/year)*
- 2015-present Graduate Teaching Fellowship, *University of Oregon*

PUBLICATIONS

Peer Reviewed Journal Articles

- [3] **Chen, S.-H.**, Lo, O.-Y., Kay, T., & Chou, L.-S. (2018). Concurrent Phone Texting Alters Crossing Behavior and Induces Gait Imbalance During Obstacle Crossing. *Gait & Posture*, 62, 422–425.
- [2] **Chen, S.-H.** and Chai, H.-M. (2017). The Role of Physical Therapy in Sports Performance. *Formosan Journal of Medicine*, 21(3), 268-275.
- [1] Catena, R.D., **Chen, S.-H.**, & Chou, L.-S. (2017). Does the Anthropometric Model Influence Whole-Body Center of Mass Calculations in Gait? *Journal of Biomechanics*, 59, 23-28.

Book

- [1] Extensibility of the Gastrocnemius Muscle-Tendon Unit After Different Static Stretching Techniques Using Ultrasonography (2012). [master thesis]

Manuscripts in Preparation

- [2] **Chen, S.-H.** and Chou, L.-S. (2019). Fatigue Increases the Risk of Dual-Task Obstacle-Crossing.
- [1] **Chen, S.-H.** and Chou, L.-S. (2019). Dual-Task Gait Balance Control After A Fatiguing Protocol.

SELECTED PRESENTATIONS

Podium Presentation

- [6] **Chen, S.-H.** and Chou, L.-S. (2018, May). Fatigue Affects Balance Control Differently During Single- and Dual-Task Walking in Older Workers. *14th Annual Northwest Biomechanics Symposium* (Bellingham, WA).
- [5] **Chen, S.-H.** and Chou, L.-S. (2017, October). Effects of Working Memory and Muscle Fatigue on Dynamic Gait Balance Control in Older Workers. *2017 Northwest Occupational Health Conference* (Spokane, WA).
- [4] Chou, L.-S., **Chen, S.-H.** & Lo, O.-Y. (2017, June). Concurrent Phone Texting Alters Crossing Behavior and Induces Gait Imbalance during Obstacle Crossing. *World Congress of International Society of Posture and Gait Research* (Lauderdale, FL).
- [3] **Chen, S.-H.**, Taylor, J. & Chou, L.-S. (2017, May). Lower Limb Muscle Fatigue Perturbs Gait Balance during Dual-Task Walking. *ACSM's 64th Annual Meeting* (Denver, Colorado)
- [2] **Chen, S.-H.**, Lo, O.-Y., Kay, T., & Chou, L.-S. (2016, July). Effect of Smartphone Texting on Gait Characteristics During Obstacle Crossing. *XIV International Symposium on 3D Analysis of Human Movement* (Taipei, Taiwan).
- [1] **Chen, S.-H.**, Chai, H.-M., Jhu, J.-L., & Wang, S.-F. (2009, March). Contraction Ability of Transversus Abdominis in Elite Fin Swimmers. *The 58th Academic Conference of the Physical Therapy Association of ROC (Taiwan)* (Taipei, Taiwan)

Poster Presentation (* indicates mentee)

- [7] **Chen, S.-H.**, Taylor, J. *, & Chou, L.-S. (2018, August). Fatigue Affects Balance Control Differently During Single- and Dual-Task Walking in Older Workers. *42th Annual Conference of the American Society of Biomechanics* (Rochester, MN).
- [6] **Chen, S.-H.**, Taylor, J. *, & Chou, L.-S. (2017, August). Lower Extremity Muscle Fatigue Changes Obstacle-Crossing Behaviors and Working Memory Performance. *41th Annual Conference of the American Society of Biomechanics* (Boulder, CO).
- [5] **Chen, S.-H.**, Taylor, J. *, & Chou, L.-S. (2017, June). Effect of Muscle Fatigue on Gait Balance Control During Dual-Task Walking. *World Congress of International Society of Posture and Gait Research* (Lauderdale, FL).
- [4] Smith, S.*, **Chen, S.-H.**, & Chou, L.-S. (2017, May). Effects of Lower Extremity Muscle Fatigue on Dual-Task Obstacle-Crossing in Active and Inactive Young Adults. *13th Annual Northwest Biomechanics Symposium* (Eugene, OR).
- [3] Taylor, J. *, **Chen, S.-H.**, & Chou, L.-S. (2017, May). Lower Extremity Muscle Fatigue Changes Gait Control and Working Memory Performance in Both Single- and Dual-Tasks. *13th Annual Northwest Biomechanics Symposium* (Eugene, OR).
- [2] **Chen, S.-H.** and Chai, H.-M. (2012, September). Intrarater Reliability of Measurement of Tissue Length of Gastrocnemius Musculotendinous Unit Using Panoramic Ultrasonography. *The 65th Academic Conference of the Physical Therapy Association of ROC (Taiwan)* (Kaohsiung, Taiwan).
- [1] Lin, S.-J., **Chen, S.-H.**, Chai, H.-M., Jan, M.-H., Jiang, C.-C. Effects of proprioceptive neuromuscular facilitation stretching technique on knee joint function in people following unilateral total knee arthroplasty. *The 16th International the World Confederation for Physical Therapy Congress* (Amsterdam, Netherlands).

Professional Presentations

- [2] Effects of Fatigue on Balance Control: An Occupational Biomechanics Study. (2018, April). *National Biomechanics Day, University of Oregon*.
- [1] Application of Biomechanics on Industrial Design. (2017, July). *Tatung University (Taipei, Taiwan)*.

MENTORING EXPERIENCES

2015-2017	Jocelyn Taylor , <i>Department of Biology, University of Oregon</i> Grant: Undergraduate Research Opportunity Program, <i>University of Oregon</i> , \$1,000
2017-present	Spencer Smith , <i>Department of Human Physiology, University of Oregon</i> Grant: Undergraduate Research Opportunity Program, <i>University of Oregon</i> , \$1,000 Center of Undergraduate Research and Engagement Travel Award , <i>University of Oregon</i>

TEACHING EXPERIENCES

<i>University of Oregon, Eugene, OR</i>	
Human Anatomy (HPHY321, HPHY323, HPHY325)	
Lab Instructor	2015-present
Assignment Coordinator	2015-2017
Lab Facilitator + Leaders of Lab Tours to High Schoolers	2017-2018
Teaching Assistant Coordinator	2018-2019
<i>Hungkuang University, Taichung, Taiwan</i>	
Orthopedic Physical Therapy : Lecturer, Case Study Leader	2015
<i>National Taiwan University, Taipei, Taiwan</i>	
Biomechanics, Kinesiology, Surface Anatomy, Elastic-Adhesive Taping : Teaching Assistant	2010-2012

SELECTED CLINICAL EXPERIENCES

<i>National Sports Training Center, Kaohsiung, Taiwan</i>	2013-2014
Physical Therapist in Olympic Weightlifting/Track and Field Teams	
✓ Implemented preventive programs, applied protective devices, developed and carried out rehabilitation program, set timetable for returning to play	
<i>Chinese Taipei Olympic Committee, Taipei, Taiwan</i>	2013-2014
Physical Therapist in Olympic Weightlifting/Track and Field Teams	
✓ Assisted athletes in participation of international sports competitions	

SELECTED PROFESSIONAL EXPERIENCES

<i>Taiwan Physical Therapy Association, Taipei, Taiwan</i>	2015
Deputy Secretary- General	
✓ Initiated a collaborative proposal in physical therapy development with 200+ physical therapists, collaborated with staff in execution of national academic conferences, administered publication of Formosan Journal of Physical Therapy (FJPT) quarterly	
<i>Pergolas Medical Technology, Taipei, Taiwan</i>	2012-2013
Project Manager	
✓ Monitored development of medical products, coordinated with researchers, physicians and manufacture to conduct clinical studies	

SERVICE

Editorial Service	
<i>Ad-Hoc Reviewer, Gait & Posture</i>	2018-present
Institutional Service	
<i>Undergraduate Academic Advisor, University of Oregon</i>	2018

Laboratory Safety Committee, *University of Oregon*

2018-present

Professional Association ServiceOpen Science- Student Subcommittee, *American Society of Biomechanics*

2018-present

Mentoring- Student Subcommittee, *American Society of Biomechanics*

2018-present

Extracurricular ServiceCo-founder of SKY@UO, *University of Oregon*

2018-present

LICENSES/ CERTIFICATES

Physical Therapist State of New York, USA, since 2016

Taiwan, since 2010

CPR/AED & First Aid MEDIC First Aid

PROFESSIONAL ASSOCIATIONS

Member American Society of Biomechanics

Member American College of Sports Medicine

Member International Society of Posture and Gait Research

RESEARCH PACKAGES

Proficient SPSS, G*power, Motion Analysis, Cortex, Dynamometer, Microsoft Office Suite, Zotero, Cognitive Test, SuperLab, Biodex, R & Rstudio

Familiar Matlab, SPSS Amos, Visual 3D, Git & Github, Electromyography

SELECTED COURSEWORK

Statistics

Educational Statistics (*EDUC614, University of Oregon*)

Winter 2016

Apply Statistic Design & Analysis (*EDUC640, University of Oregon*)

Spring 2016

Multiple Regression (*EDUC642, University of Oregon*)

Fall 2017

Apply Multivariate Analysis (*EDUC644, University of Oregon*)

Winter 2018

Hierarchical and Mixed Effects (*DataCamp*)

Fall 2018

Neuroscience

Learning & Memory (*PSY533, University of Oregon*)

Fall 2016

Movement Disorders (*HPHY534, University of Oregon*)

Winter 2017

Data Science

Introduction to Data Science with R (*EDLD610, University of Oregon*)

Fall 2018

Communicating and Transforming Data (*EDLD610, University of Oregon*)

Winter 2019

PROFESSIONAL DEVELOPMENT2018 Instructor Training: Tai Ji Quan: Moving for Better Balance® (TJQMBB), *Oregon Research Institute*2018 Teaching Academy, *Department of Human Physiology, UO*2017 Teaching Academy, *Department of Human Physiology, UO*2017 Teaching Academy, *Department of Human Physiology, UO*2016 Teaching Academy, *Department of Human Physiology, UO*2016-2018 Neurophysiology Journal Club, *Department of Human Physiology, UO*2015 Teaching Academy, *Department of Human Physiology, UO*2015-2018 Biomechanics Journal Club, *Department of Human Physiology, UO*