*Curriculum Vitae*

**SZU-HUA TERESA CHEN**

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|  | | **szuhuac@uoregon.edu** |  | **teresashchen** | |  | **ptteresachen** | | |
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| As a physical therapist, I aim to develop my career in the direction of mobility impairment research with translational applications to patient care or exercise performance. My current research focuses on age-related declines in cognitive and physical functions and their contributions to gait imbalance, ultimately leading to new rehabilitation interventions. | | | | | | | | | | |
| **EDUCATION** | | | | | | | | | | |
| 2015  |  2019 | **Ph.D. in Human Physiology, University of Oregon** | | | | | | | | | |
| * Dissertation: Effects of Fatigue on Balance Control During Dual-task Walking | | | | | | | | | |
| * Emphases: Biomechanics, Motion Analysis, Balance Control | | | | | | | | | |
| 2010  |  2012 | **M.S. in Physical Therapy, National Taiwan University**   * Thesis: Extensibility of the Gastrocnemius Muscle-Tendon Unit After Different Static Stretching Techniques Using Ultrasonography | | | | | | | | | |
| * Emphases: Orthopedic Rehabilitation, Sports Physical Therapy, Ultrasonography | | | | | | | | | |
| * Service Excellence Award | | | | | | | | | |
| 2006  |  2010 | **B.S. in Physical Therapy, National Taiwan University** | | | | | | | | | |
| * Academic Excellence Award (six times) | Outstanding Clinical Internship Award | | | | | | | | | |
| **BRIEF PROFESSIONAL HISTORY** | | | | | | | | | | |
| 2015  |  2019 | **Graduate Employee**, University of Oregon | | | | | | | | Eugene | |
| 2015 | **Deputy Secretary,** Taiwan Physical Therapy Association   * 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 | | | | | | | | Taipei | |
| 2013  |  2014 | **Physical Therapist**, National Sports Training Center/ Chinese Taipei Olympic Committee   * Implemented preventive programs, applied protective devices, developed and carried out rehabilitation program, assisted in participation of international meets | | | | | | | | Kaohsiung | |
| 2012  |  2013 | **Project Manager**, Startup Company   * Monitored development of medical products, coordinated with researchers, physicians and manufacturers to conduct clinical studies | | | | | | | | Taipei | |
| 2011 | **Graduate Teaching Assistant**, National Taiwan University | | | | | | | | Taipei | |
| 2009 | **Undergraduate Research Assistant**, National Taiwan University | | | | | | | | Taipei | |
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| **LICENSURE & CERTIFICATION** | | |
| **Physical Therapist** | New York State Education Department, NY  Ministry of Education, Taiwan | 2016-present  2010-present |
| **Certified BLS for Healthcare Providers** | American Heart Association | 2017-present |

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| ***Scholarship*** | | | |
| **AWARDS & HONORS** | | | |
| 2019 | | | Ursula (Sue) Moshberger Scholarship, *Human Physiology, University of Oregon* |
| 2018 | | | Ursula (Sue) Moshberger Scholarship, *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* |
| 2015-2019 | | | Graduate Teaching Fellowship, *University of Oregon* |
| **GRANTS** | | | |
| **Awarded** | |  | |
| 2017 | | Professional Training Opportunities Program, *Northwest Center for Occupational Health and Safety* (**Role**: Principal Investigator) *$5,805* | |
| Not awarded | | | |
| 2018 | | The DLF Research Scholarship, *The De Luca Foundation* (Principal Investigator) | |
| **PUBLICATIONS** | | | |
| **Peer Reviewed Journal Articles** | | | |
| [4] | Tsai, Y.-J., Hsu, J.-C., Lin F.-Y., **Chen, S.-H.** and Chai, H.-M. (2019). Effect of Triceps Surae Taping on Vertical Jump. *Formosan Journal of Physical Therapy*, 44(1), 29-36. (In Mandarin) | | |
| [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. (In Mandarin) | | |
| [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 Review/Preparation** | | | |
| [5] | **Chen, S.-H.** & Chou, L.-S. Can Fatigue Affect Inter-Joint Coordination Variability? (In Preparation) | | |
| [4] | **Chen, S.-H.** & Chou, L.-S. Gait Balance Control After Fatigue: Effects of Age and Cognitive Demand. (In Preparation) | | |
| [3] | **Chen, S.-H.** & Chou, L.-S. Older Is Not Always Worse: Balance Control and Working Memory Performance During Obstacle-Crossing After Fatigue. (In Preparation) | | |
| [2] | Pitt, W., **Chen, S.-H.,** and Chou, L.-S. (2019) Using IMU-Based Biomechanical Markers to Monitor Gait Balance Control Recovery in Acutely Concussed Individuals. *Clinical Biomechanics*. (In Review) | | |
| [1] | Pitt, W., **Chen, S.-H.,** Davidson, C, Stowell, C, and Chou, L.-S. (2019) Sensitivity and Specificity of IMU and Neurocognitive Measures to Detect Post-Concussion Gait Imbalance in Dual-Task Walking. *American Journal of Sports Medicine.* (In Review) | | |
| **PRESENTATIONS** | | | |
| **Podium Presentation** (\* indicates mentee) | | | |
| [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) | | | |
| [8] | **Chen, S.-H.** and Chou, L.-S. (2019, July). A Preliminary Investigation on Gait Balance Control after Fatigue: Effects of Age and Cognitive Demand. *43th Annual Conference of the American Society of Biomechanics* (Calgary, Canada). | | |
| [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, Netherland). | | |
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| **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,* Taiwan. | | |

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| **RSEARCH PACKAGES** | |
| Proficient | SPSS, G\*power, Motion Analysis, Cortex, Dynamometer, Microsoft Office Suite, Zotero, Cognitive Test, SuperLab, Biodex, R & Rstudio, Ultrasonography |
| Familiar | Matlab, SPSS Amos, Visual 3D, Git & Github, Electromyography |

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| ***Teaching*** | | | | | |
| **MENTORING** | | | | | |
| 2015  |  2017 | * **Jocelyn Taylor,** *Department of Biology, University of Oregon* | | | | |
| Grant: Undergraduate Research Opportunity Program, *University of Oregon, $1,000* | | | | |
| 2017  |  2019 | * **Spencer Smith,** *Department of Human Physiology, University of Oregon* | | | | |
| Grant: Undergraduate Research Opportunity Program, *University of Oregon, $1,000*  **Center of Undergraduate Research and Engagement Travel Award**, *University of Oregon* | | | | |
| **COURSES TAUGHT** | | | | |
| *University of Oregon, Eugene, OR* (average teaching effective score: 4.8/5) | | |  | |
| **Human Anatomy** (HPHY321, HPHY323, HPHY325) | | |  | |
| * Instructor of record | | | 2019 Summer | |
| * Coordinator of Teaching Assistants | | | 2018-2019 | |
| * Lab Facilitator + Tour Leader | | | 2017-2018 | |
| * Assignment Coordinator | | | 2015-2017 | |
| * Lab Instructor | | | 2015-2019 | |
| *Hungkuang University, Taichung, Taiwan* | | |  | |
| **Orthopedic Physical Therapy**   * Instructor of record | | | 2015 | |
| *National Taiwan University, Taipei, Taiwan* | | |  | |
| **Biomechanics, Kinesiology, Surface Anatomy, Elastic-Adhesive Taping**   * Teaching Assistant | | | | 2010-2012 |
| **CLINICAL PRECEPTOR** | | | | |
| Athletic Trainer, *National Training Center, Taiwan* | | | | 2013-2014 |
| Student Physical Therapist, *Women Basketball Team, National Taiwan University* | | | | 2012-2013 |
| ***Services*** | | | | | |
| **SELECTED SERVICES** | | | | | |
| **Editorial Service** | |  | | | |
| *Ad-Hoc* Reviewer, *Gait & Posture* | | 2018-present | | | |
| **Institutional Service** | |  | | | |
| Undergraduate Academic Advisor, *University of Oregon* | | 2018 | | | |
| Laboratory Safety Committee, *University of Oregon* | | 2018-2019 | | | |
| **Extracurricular Service** | |  | | | |
| Co-founder of SKY@UO, *University of Oregon* | | 2018-2019 | | | |
| **Physical Therapist** | |  | | | |
| Swimming, *Li-Yuan Elementary School, New Taipei, Taiwan* | | 2015 | | | |
| Women Basketball Team, *National Taiwan University, Taiwan* | | 2012-2013 | | | |
| Track & Field Team, *National Taiwan University, Taiwan* | | 2011-2012 | | | |

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| **PROFESSIONAL ASSOCIATIONS** | | | | | | |
| Member | | American Society of Biomechanics | | | 2016-present | |
| Member | | American College of Sports Medicine | | | 2016-present | |
| Member | | International Society of Posture and Gait Research | | | 2017-present | |
| ***Professional Development*** | | | | | | |
| **ADDITIONAL 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 |
|  | | Functional Programming with R *(EDLD610, University of Oregon)* | | | | Spring 2019 |
| **WORKSHOP ATTENDED** | | | | | | |
| Research | 2018 | | Instructor Training: Tai Ji Quan: Moving for Better Balance® (TJQMBB), *Oregon Research Institute* | | | |
| Teaching | 2018 | | Teaching Academy, *Department of Human Physiology, UO* | | | |
| Teaching | 2017 | | Teaching Academy, *Department of Human Physiology, UO* | | | |
| Teaching | 2017 | | Teaching Academy, *Department of Human Physiology, UO* | | | |
| Teaching | 2016 | | Teaching Academy, *Department of Human Physiology, UO* | | | |
| Research | 2016-2018 | | Neurophysiology Journal Club, *Department of Human Physiology, UO* | | | |
| Teaching | 2015 | | Teaching Academy, *Department of Human Physiology, UO* | | | |
| Research | 2015-2018 | | Biomechanics Journal Club, *Department of Human Physiology, UO* | | | |