CURRICULUM VITAE

Patima Silsupadol, PT, Ph.D. patimas@binghamton.edu

EDUCATION/DEGREES	
2008	Doctor of Philosophy (Motor Control), University of Oregon, USA
2005	Master of Science (Motor Control), University of Oregon, USA
1997	Bachelor of Science (Physical Therapy): First Class Honor Degree, Chiang Mai University, Thailand
<u>Positions</u>	
2013 - 2021	Assistant Professor, Department of Physical Therapy, Faculty of Associated Medical Sciences, Chiang Mai University, Thailand
2012 - 2021	Committee for the Bachelor of Science Program in Physical Therapy, Faculty of Associated Medical Sciences, Chiang Mai University, Thailand
2008 - 2021	Committee for the Doctor of Philosophy Program in Biomedical Sciences, Faculty of Associated Medical Sciences, Chiang Mai University, Thailand
2013 - 2019	Head of Geriatric Physical Therapy, Department of Physical Therapy, Faculty of Associated Medical Sciences, Chiang Mai University, Thailand
2008 - 2013	Lecturer, Department of Physical Therapy, Faculty of Associated Medical Sciences, Chiang Mai University, Thailand
2002 - 2008	Graduate Research Fellow, Department of Human Physiology, University of Oregon, USA
1997 - 2002	Physical Therapist, Department of Orthopedics, Faculty of Medicine, Chiang Mai University, Thailand
Honors and Awards	
2019	Elite reviewer for the Archives of Physical Medicine and Rehabilitation
2018	The World Council of Biomechanics Travel Award

Elite reviewer for the Archives of Physical Medicine and Rehabilitation

Royal Thai Government Scholarship

2017

2002 - 2008

FUNDING 2018-2019 Co-investigator, A smartphone-based assessment of free-living gait in young adults and older adults with and without a history of falls (60,000 Baht) 2018-2019 PI, Validity of a smartphone-based assessment of gait during straight walking, turning, and walking speed modulation in laboratory and freeliving environments, Chiang Mai University (51,600 Baht) Co-investigator, Development of mobile emergency alert device for 2017-2018 dependent people, Chiang Mai University (60,000 Baht) 2016-2017 PI, Validity of a smartphone-based accelerometer for gait assessment in older adults, Chiang Mai University (52,302 Baht) 2014-2015 PI, Falls and functional mobility in older adults who practice mindfulness meditation, Chiang Mai University (60,000 Baht) 2014-2016 Co-investigator, Development of a physical fitness assessment tool to perform activities of daily-living related high risk of disability for Thai elderly, National Research Council of Thailand (500,000 Baht) 2014-2015 Co-investigator, Gait speed during different walking conditions in patients with chronic neck pain, Chiang Mai University (40,320 Baht) 2013-2014 Co-investigator, Physiological factors and functional ability predicting recurrent falls in the elderly, Chiang Mai University (51,620 Baht) 2013-2014 Co-investigator, The effect of hip protector on falls in the elderly, Chiang Mai University (45,000 Baht) 2012-2013 Co-investigator, Physiological factors associated with fall and functional ability in Thai community-dwelling elderly, Chiang Mai University (60,000 Baht) 2011-2012 Co-investigator, Effects of sit-to-stand home-based exercise on muscle performance, physical performance and quality of life in the elderly, Chiang Mai University (57,145 Baht) 2010-2011 PI, Correlations between dividing and allocating attention during sitting and dual-task gait performance in older adults, Chiang Mai University (48,180 Baht) 2009-2010 Co-investigator, The effectiveness of aerobic exercises using VCD on physical fitness in obese children, Chiang Mai University (60,000 Baht)

AREAS OF SPECIAL INTEREST

- Motor Control
- Biomechanics

- Cognitive Functions
- Geriatric Physical Therapy

RESEARCH INTERESTS

- Falls in Older Adults
- Balance and Gait
- Training and Rehabilitation
- Smartphone-based Assessment and Intervention

SERVICE TO THE FIELD

Manuscript Reviewer:

- Aging, Neuropsychology and Cognition
- American Journal of Physical Medicine & Rehabilitation
- Archives of Physical Medicine and Rehabilitation
- Gait and Posture
- Health and Quality of Life Outcomes
- Hong Kong Physiotherapy Journal
- International Journal of Therapy and Rehabilitation
- Journal of the American Aging Association

- Journal of Applied Developmental Psychology
- Journal of Associated Medical Sciences
- Journal of Motor Behavior
- Journal of Neurology
- Medicine
- Restorative Neurology and Neuroscience
- Somatosensory and Motor Research
- Srinagarind Medical Journal
- The Physician and Sportsmedicine
- Thai Journal of Physical Therapy

MEMBERSHIPS

The Physical Therapy Association Thailand

PEER-REVIEWED PUBLICATIONS

Sriburi C, Musikarat P, **Silsupadol P**, Srisupornkornkool K. Effects of backward and forward walking training on balance, spatiotemporal gait characteristics and risk of fall in elderly. Thai J Phys Ther. 2022;44:12-28.

- Lugade V, Kuntapun J, Prupetkaew P, Boripuntakul S, Verner E, Silsupadol P. Three-day remote monitoring of gait among young and older adults using participants' personal smartphones. J Aging Phys Act. 2021;29:1026-33.
- Phirawatthakul C, **Silsupadol P**, Chamnongkich S. Comparison of balance ability in elderly with and without history of falls using Will Balance Board. Thai J Phys Ther. 2021;43:111-122.
- Kuntapun J, **Silsupadol P**, Kamnardsiri T, Lugade V. Smartphone monitoring of gait and balance during irregular surface walking and obstacle crossing. Front. Sports Act. Living. 2020. doi:10.3389/fspor.2020.560577
- Sittikraipong K, **Silsupadol P**, Uthaikhup S. Slower reaction and response times and impaired hand-eye coordination in individuals with neck pain. Musculoskelet Sci Pract. 2020. doi:10.1016/j.msksp.2020.102273
- **Silsupadol P**, Prupetkaew P, Kamnardsiri T, Lugade V. Smartphone-based assessment of gait during straight walking, turning, and walking speed modulation in laboratory and free-living environments. IEEE J Biomed Health Inform. 2020;24:1188-95.
- Lersilp S, Putthinoi S, Lettrakarnnon P, **Silsupadol P**. Development and Usability Testing of an Emergency Alert Device for Elderly People and People with Disabilities. ScientificWorldJournal. 2020. doi:10.1155/2020/5102849
- Kuntapun J, Lugade V, Kamnardsiri T, **Silsupadol P**. Effects of walking over uneven surfaces and crossing an obstacle on gait and balance parameters in young and older adults. Thai J Phys Ther. 2020;42:186-97.
- Prupetkaew P, Lugade V, Kamnardsiri T, **Silsupadol P**. Cognitive and visual demands, but not gross motor demand, of concurrent smartphone use affect laboratory and free-living gait among young and older adults. Gait Posture. 2019;68:30-6.
- Prupetkaew P, Lugade V, Kamnardsiri T, **Silsupadol P**. Validity of a smartphone-based assessment of spatiotemporal gait parameters and center of mass displacement during single- and dual-task walking. Thai J Phys Ther. 2019;41:42-53.
- **Silsupadol P**, Teja K, Lugade V. Reliability and validity of a smartphone-based assessment of gait parameters across walking speed and smartphone locations: body, bag, belt, hand, and pocket. Gait Posture. 2017;58:516-22.
- Teja K, Lugade V, **Silsupadol P**. Effect of smartphone location and walking speed on spatiotemporal gait parameters in older adults. J Assoc Med Sci. 2017;50:507-15.
- Srimaloon K, **Silsupadol P**, Sungkarat S. Effect of dual task on balance in older adults with mild cognitive impairment. J Assoc Med Sci. 2017;50:605-16.
- Wongcharoen S, Sungkarat S, Munkhetvit P, Lugade V, **Silsupadol P**. Home-based interventions improved trained, but not novel, dual-task balance performance in older adults: A randomized controlled trial. Gait Posture. 2017;52:147-52.
- Wongcharoen S, Munkhetvit P, Sungkarat S, Lugade V, **Silsupadol P**. The effect of walking task contexts on dual-task walking performance among older adults. Thai J Phys Ther. 2016;38:103-113.

- Viriyawattanakul M, **Silsupadol P**, Shin-Yu W, and Prasartwuth O. Effectiveness of Hornsby Healthy Hip Pants on hip fracture prevention from falls in the elders living in institution. Journal of Medical Technology and Physical Therapy. 2015;27:287-97.
- **Silsupadol P**. Exercise as an intervention for preventing falls in community-dwelling older adults. Thai J Phys Ther. 2012;34:180-92.
- Puipanichsiri P, **Silsupadol P**. The role of age, balance ability, additional task characteristics, and ability to allocate attention to gait. Thai J Phys Ther. 2012; 34: 168-79.
- Hawkes TD, Siu KC, **Silsupadol P**, Woollacott MH. Why does older adults' balance become less stable when walking and performing a secondary task? Examination of attentional switching abilities. Gait Posture. 2012;35:159-63.
- Wongcharoen S, Uthaikhup S, **Silsupadol P**. Contributing factors to dual-task related gait changes in elders. Thai J Phys Ther. 2012;34:24-36.
- Kumfu S, **Silsupadol P**, Sungkarat S. Effects of executive function and attention on gait in individuals with mild cognitive impairment. Thai J Phys Ther. 2012;34:12-23.
- Hensangvilai K, Pratanaphon S, **Silsupadol P**, Sunanchai A. The effectiveness of using VCD aerobic exercises on physical fitness in obese children. Bull Chiang Mai Assoc Med Sci. 2012;45:52-8.
- Chounchay S, Sungkarat S, **Silsupadol P**. Impact of footwear styles on postural control ability of female elderly. J Gerontol Geriatric Med. 2010;11:25-35.
- **Silsupadol P**, Lugade V, Shumway-Cook A, van Donkelaar P, Chou LS, Mayr U, Woollacott MH. Training-related changes in dual-task walking performance of elderly persons with balance impairment: a double-blind, randomized controlled trial. Gait Posture. 2009;29:634-9.
- **Silsupadol P**, Shumway-Cook A, Lugade V, van Donkelaar P, Chou LS, Mayr U, Woollacott MH. Effects of single-task versus dual-task training on balance performance in older adults: a double-blind, randomized controlled trial. Arch Phys Med Rehabil. 2009;90:381-387.
- **Silsupadol P**, Siu KC, Shumway-Cook A, Woollacott MH. Training of balance under single- and dual-task conditions in older adults with balance impairment. Phys Ther. 2006;86:269-281.

BOOKS AND OTHER PUBLICATIONS

Silsupadol P, Verner O, Verner E, Lugade V. A guide to English conversation for physical therapists. Chiang Mai: Department of Physical Therapy, Faculty of Associated Medical Sciences, Chiang Mai University; 2014.

CD: Stretching exercise and aerobic exercise for older adults.

PEER-REVIEWED PRESENTATIONS AND PROCEEDINGS

- **Silsupadol P**, Prupetkaew P, Kamnardsiri T, Lugade V. Effect of motor, visual, and cognitive demand of smartphone use on gait among young and older adults in laboratory and free-living environments. The 2018 World Congress of Biomechanics. Dublin, Ireland. 2018.
- Wongcharoen S, Lugade V, **Silsupadol P**. Factors contributing to increased risk of falling in community-dwelling older adults. International Graduate Research Conference 2015. Chiang Mai, Thailand. 2015.
- Lugade V, **Silsupadol P**, Wongcharoen S. Effect of mindfulness meditation on gait and cognitive performance in the elderly. Annual Whitaker International Enrichment Seminar. Budapest, Hungary. 2015
- Sungkarat S, Uthaikhup S, **Silsupadol P**. Physiological and functional factors predicting recurrent falls in community-dwelling older adults. The International Physical Therapy Conference 2014. Chiang Mai, Thailand. 2014.
- Lugade V, **Silsupadol P**. Effect of mindfulness meditation on cognitive performance and gait: differences between Thai and US older adults. Annual Whitaker International Enrichment Seminar. Rome, Italy. 2014.
- Hawkes T, Siu KC, **Silsupadol P**, Woollacott MH. Why does older adults' balance become less stable when walking and performing a secondary task? Examination of attention. Progress in Motor Control VIII. Cincinnati, Ohio. 2011.
- Lugade V, Ewers S, Chen C-J, Boonyong S, **Silsupadol P**, Chou L-S. Quantifying the base of support in adults during gait. Proceedings of the 2008 Northwest Biomechanics Symposium. Boise State University. 2008.
- Lugade V, Ewers S, Chen C-J, Boonyong S, **Silsupadol P**, Chou L-S. Defining the base of support during gait: Identifying balance impairment in the elderly. North American Conference on Biomechanics. Ann Arbor, Michigan. 2008.
- Lugade V, Ewers S, Chen C-J, Boonyong S, **Silsupadol P**, Chou L-S. Detection of gait imbalance using the extrapolated center of mass. North American Conference on Biomechanics. Ann Arbor, Michigan. 2008.
- **Silsupadol P**, Lugade V, Chou LS et al. Effects of single- vs. dual-task training in older adults with balance impairment. International Society of Biomechanics XXI Congress, Taipei, Taiwan. 2007.
- **Silsupadol P**, Siu KC, Shumway-Cook A et al. Training of balance under single and dual task conditions in older adults with balance impairment: Three case reports. International Society of Posture & Gait Research, Marseille, France. 2005.
- Ratanapinunchai J, **Silsupadol P**. Factors influencing self-selected throwing styles of young children under the maximum distance thrown effort. Poster presentation in the 5th Biennial Motor Control and Human Skill Research workshop. Gold Coast, Queensland, Australia. 2000.