

CURRICULUM VITAE
SOMPORN SUNGKARAT (ONLAOR), Ph.D., P.T.

PERSONAL INFORMATION

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EDUCATION

Post-graduate: University of Southern California, Los Angeles, CA, USA
Ph.D. Biokinesiology, 2001
University of Southern California, Los Angeles, CA, USA
M.S. Biokinesiology and Physical Therapy, 1996

Undergraduate: Chiang Mai University, Chiang Mai, Thailand
B.S. Physical Therapy, 1991

POSITIONS AND APPOINTMENTS

2019-present Chair of PhD Program (Biomedical Sciences, International Program),
Faculty of Associated Medical Sciences, Chiang Mai University

2018-present Associate Editor of the Hong Kong Physiotherapy Journal

2014-present Associate Professor, Department of Physical Therapy
Chiang Mai University, Chiang Mai, Thailand

2012-present Human Research Ethics Committee
Faculty of Associated Medical Sciences, Chiang Mai University, Thailand

2004-present Committee of Master Program (Movement and Exercise Sciences),
Faculty of Associated Medical Sciences, Chiang Mai University

2017-2019 Committee of PhD Program (Biomedical Sciences), Faculty of
Associated Medical Sciences, Chiang Mai University

2010-2012 Associate Dean for Research and International Relations
Faculty of Associated Medical Sciences, Chiang Mai University, Thailand

2007-2012 Secretary of the Human Ethic Committee
Faculty of Associated Medical Sciences, Chiang Mai University, Thailand

2004-2010 Assistant Dean for Research and International Relations
Faculty of Associated Medical Sciences, Chiang Mai University, Thailand

1992-2003 Lecturer, Department of Physical Therapy
Chiang Mai University, Chiang Mai, Thailand

HONORS AND AWARDS

- Royal Thai Government Scholarship, 1994-1999
- University of Southern California Alumni Scholarship, 1996, 1999
- Academic Achievement Award, University of Southern California, 2000
- Golden Cane Award, Department of Biokinesiology and Physical Therapy, University of Southern California, 2000
- Outstanding Contribution to Department of Biokinesiology and Physical Therapy from Ph.D. Students, University of Southern California, 2001
- Research travel grant from Office of The Higher Education Commission of Thailand to visit institutions in North America under the project entitled: Neurorehabilitation: from evidence to practice, May, 2005
- Travel grant from WHO as Physical Therapist representative from Thailand to participate in The International ICF Core Sets Consensus Conference for Multiple Sclerosis at Valens Rehabilitation Centre, Switzerland, May 2008
- Good poster presentation for the research entitled “Efficacy of an insole shoe-wedge and augmented pressure sensor during gait training for individuals with stroke”, Chiang Mai University Academic Days: The 4th Annual Meeting: Innovation for Life, December, 2008.
- Best poster presentation for the research entitled “The effects of combined physical-cognitive training on cognitive function of individuals with mild cognitive impairment (MCI): A randomized controlled trial”, The 13th Pan-Pacific Conference on Rehabilitation: Health and Well-being Beyond the Era of New Normal, November 2023.

RESEARCH INTEREST

- Motor control and learning
- Neurorehabilitation (focused on balance and gait)
- Brain-body connections: effects of exercise on cognitive function

MEMBERSHIP

- International Parkinson and Movement Disorder Society
- Thai Physical Therapy Association

EDITORIAL BOARD

Associate Editor, Hong Kong Physiotherapy Journal
Editorial Board, Nursing and Health Sciences (NHS)

REVIEWERS

- Archives of Allied Health Sciences
- ASEAN Journal of Rehabilitation Medicine
- Brain
- BMC Geriatrics
- BMJ Open
- Chiang Mai Medical Journal
- Clinical Rehabilitation
- Clinical Interventions in Aging
- Digital Health
- Disability and rehabilitation
- IEEE Transactions on Games
- JAMA Network Open
- JMIR Serious Games
- Journal of Associated Medical Sciences (JAMS)
- Journal of Health Science and Medical Research (JHSMR)
- Journal of Integrative Medicine
- Journal of Medical Engineering and Technology
- Journal of Nursing and Health Sciences
- Journal of Population Ageing
- Physical and Occupational Therapy in Geriatrics
- PLOS ONE
- Preventive Medicine Reports
- Suranaree Journal of Science and Technology
- Thai Journal of Physical Therapy
- Walailak Journal of Science and Technology (WJST)

BOOK and BOOK CHAPTER

Sungkarat, S. (2013). Neurorehabilitation of Individuals with Brain Disorders: From Theory to Practice. Siamnana Printing, Chiang Mai. ISBN 978-616-335-641-3. (written in Thai)

Kovindha, A. & **Sungkarat, S.** (2016). Walking and Walking Training. In Kovindha, A. Ed. Textbook of Spinal Cord Injury: Comprehensive Rehabilitation III: Towards Independent Living. Thanakrit Printing, Chiang Mai. ISBN 978-616-406-867-4. pp. 1-63. (written in Thai)

PUBLICATIONS (peer-reviewed)

International publications:

Kamnardsiri T, Kumfu S, Munkhetvit P, Boripuntakul S, **Sungkarat S**. Home-based, low-intensity, gamification-based, interactive physical-cognitive training for older adults using the ADDIE model: Design, development, and evaluation of user experience. JMIR Serious Games 2024;12:e5914. doi: [10.2196/59141](https://doi.org/10.2196/59141).

Keawtep P, **Sungkarat S**, Boripuntakul S, Sa-Nguanmoo P, Wichayanrat W, Chattipakorn SC, Worakul P. Effects of combined dietary intervention and physical-cognitive exercise on cognitive function and cardiometabolic health of postmenopausal women with obesity: a randomized controlled trial. Int J Behav Nutr Phys Act. 2024 Mar 5;21(1):28. doi: [10.1186/s12966-024-01580-z](https://doi.org/10.1186/s12966-024-01580-z). PMID: 38443944; PMCID: PMC10913568.

Poosri T, Boripuntakul S, **Sungkarat S**, Kamnardsiri T, Soontornpun A, Pinyopornpanish K. Gait smoothness during high-demand motor walking tasks in older adults with mild cognitive impairment. PLoS One. 2024 Jan 19;19(1):e0296710. doi: [10.1371/journal.pone.0296710](https://doi.org/10.1371/journal.pone.0296710). PMID: 38241332; PMCID: PMC10798528.

Keawtep P, Kamnardsiri T, Boripuntakul S, Wichayanrat W, Worakul P, **Sungkarat S**. Feasibility of Internet-Based Physical-Cognitive Exercise for Health Benefits of Middle-Aged Obese Women. J Prim Care Community Health. 2023 Jan-Dec;14:21501319231189961. doi: [10.1177/21501319231189961](https://doi.org/10.1177/21501319231189961). PMID: 37522590; PMCID: PMC10392207.

Keawtep P, Wichayanrat W, Boripuntakul S, Chattipakorn S, Worakul P, **Sungkarat S**. Physical-cognitive Training with Dietary Intervention to Improve Cognitive Function and Circulating Biomarkers in Postmenopausal Women with Obesity: Study Protocol for A Randomized Controlled Trial. Adv Integr Med. 2023 Mar 1; 10(1); 22-28.

Keawtep P, Wichayanrat W, Boripuntakul S, Chattipakorn SC, **Sungkarat S**. Cognitive Benefits of Physical Exercise, Physical-Cognitive Training, and Technology-Based Intervention in Obese Individuals with and without Postmenopausal Condition: A Narrative Review. Int J Environ Res Public Health. 2022 Oct 16;19(20):13364. doi: [10.3390/ijerph192013364](https://doi.org/10.3390/ijerph192013364). PMID: 36293943; PMCID: PMC9603710.

Chaiwong P, Rattakorn P, **Sungkarat S**, Kattiya N, Tuttle D, Munkhetvit P. Psychometric properties of a new occupational therapy cognitive outcome measure for Thai older adults with cognitive impairments. JAMS. 2022;56(1):26–34. Retrieved from <https://he01.tci-thaijo.org/index.php/bulletinAMS/article/view/257501>

Boripuntakul S, Kamnardsiri T, Lord SR, Maiarin S, Worakul P, **Sungkarat S**. Gait variability during abrupt slow and fast speed transitions in older adults with mild cognitive impairment. PLoS One. 2022 Oct 21;17(10):e0276658. doi: 10.1371/journal.pone.0276658. PMID: 36269750; PMCID: PMC9586342.

Wichayanrat W, Boripuntakul S, Keawtep P, Worakul P, **Sungkarat S**. Obesity and brain health: the impact of metabolic syndrome and cardiorespiratory fitness on cognitive performances in middle-aged obese women. J Prev Alzheimers Dis. 2022;9(4):701-707. doi: 10.14283/jpad.2022.54. PMID: 36281674.

Chuatrakoon B, Uthaihpun S, Ngai SP, Liwsrisakun C, Pothirat C, **Sungkarat S**. The effectiveness of home-based balance and pulmonary rehabilitation program in individuals with chronic obstructive pulmonary disease: a randomized controlled trial. Eur J Phys Rehabil Med. 2022 Mar 4. doi: 10.23736/S1973-9087.22.07383-X.

Pipatsrisawat S, Klaphajone J, Kitisak K, **Sungkarat S**, Wivatvongvana P. Effects of combining two techniques of non-invasive brain stimulation in subacute stroke patients: a pilot study. BMC Neurol. 2022; 22:98. Available from <https://doi.org/10.1186/s12883-022-02607-3>.

Chaiwong P, **Sungkarat S**, Rattakorn P, Munkhetvit P. Cognitive assessment and intervention in occupational therapy for Thai older adults with neurocognitive disorders. JAMS 2022; 55(2):16–22.

Kamnardsiri T, Phirom K, Boripuntakul S, **Sungkarat S**. An interactive physical-cognitive game-based training system using Kinect for older adults: development and usability study. JMIR Serious Games. 2021 Oct 27;9(4):e27848. doi: 10.2196/27848. PMID: 34704953.

Thaiyanto J, Sittichoke C, Phirom K, **Sungkarat S**. Effects of multicomponent exercise on cognitive performance and fall risk in older women with mild cognitive impairment. J Nutr Health Aging; 2021;25(2):160-164. doi: 10.1007/s12603-020-1458-5. PMID: 33491029.

Phirom K, Kamnardsiri T, **Sungkarat S**. Beneficial effects of an interactive physical-cognitive game-based training on fall risk and cognitive performance of older adults. *Int J Environ Res Public Health* 2020;17:6079. Available from <https://doi.org/10.3390/ijerph17176079>.

Kantatong T, Athavudh D, Panpanich R, **Sungkarat S**, Siviroy P. Predicting quality of life in chronic obstructive pulmonary disease patients living in the rural area of Chiang Mai Province, Thailand. *Open Public Health Journal* 2020;13:357-364, ID TOPHJ-13-357. Available from: <https://doi.org/10.2174/1874944502013010357>.

Chittrakul J, Siviroy P, **Sungkarat S**, Sapbamrer R. Physical Frailty and Fall Risk in Community-Dwelling Older Adults: A Cross-Sectional Study. *J Aging Res* 2020; ID 3964973. Available from: <https://doi.org/10.1155/2020/3964973>.

Sadjapong U, YodkeereeS, **Sungkarat S**, Siviroy P. Multicomponent exercise program reduces frailty and inflammatory biomarkers and improves physical performance in community-dwelling older adults: a randomized controlled trial. *Int J Environ Res Public Health* 2020;17:E3760. Available from: <https://doi.org/10.3390/ijerph17113760>.

Chittrakul J, Siviroy P, **Sungkarat S**, Sapbamrer R. Multi-system physical exercise intervention for fall prevention and quality of life in pre-frail older adults: a randomized controlled trial. *Int J Environ Res Public Health* 2020;17:E3102. Available from: <https://doi.org/10.3390/ijerph17093102>.

Chuatrakoon B, Ngai SPC, **Sungkarat S**, Uthaikhup S. Balance impairment and effectiveness of exercise intervention in chronic obstructive pulmonary disease-a systematic review. *Arch Phys Med Rehabil* 2020. Available from: <https://doi.org/10.1016/j.apmr.2020.01.016>.

Sadjapong U, YodkeereeS, **Sungkarat S**, Saoin S, Siviroy P. Significant association between physical performance and inflammatory biomarkers in older adults with frailty in rural Thailand. *Open Public Health Journal* 2020;**13(1)** 723–733, ID TOPHJ-13-723. Available from: <https://doi.org/10.2174/1874944502013010723>.

Sremakaew M, **Sungkarat S**, Treleaven J, Uthaikhup S. Effects of tandem walk and cognitive and motor dual- tasks on gait speed in individuals with chronic idiopathic neck pain: a preliminary study. *Physiother Theory Pract* 2019:1-7.

Kantatong T, Panpanich R, Deesomchok A, **Sungkarat S**, Siviroj P. Effects of the Tai Chi qigong programme on functional capacity and lung function in chronic obstructive pulmonary disease patients: a randomised controlled trial. J Tradit Complement Med 2019. Available from: <https://doi.org/10.1016/j.jtcme.2019.03.008>.

Sittichoke C, Buasord J, Boripuntakul S, **Sungkarat S**. Effects of compliant flooring on dynamic balance and gait characteristics of community-dwelling older persons. J Nutr Health Aging 2019;23(7):665-8.

Ratanapinunchai J, Mathiyakom W, **Sungkarat S**. Scapular upward rotation during passive humeral abduction in individuals with hemiplegia post-stroke. Ann Rehabil Med 2019;43(2):1-9.

Sremakaew M, **Sungkarat S**, Treleaven J, Uthaikhup S. Impaired standing balance in individuals with cervicogenic headache and migraine. J Oral Facial Pain H 2018;32:321-8.

Sungkarat S, Boripuntakul S, Kumfu S, Lord S, Chattipakorn N. Tai Chi improves cognition and plasma BDNF in older adults with mild cognitive impairment: a randomized controlled trial. Neurorehabil Neural Repair 2018;32(2):142-9.

Wongcharoen S, **Sungkarat S**, Munkhetvit P, Lugade V, Silsupadol P. Home-based interventions improve trained, but not novel, dual-task balance performance in older adults: a randomized controlled trial. Gait Posture 2017;52:147-52.

Sungkarat S, Boripuntakul S, Chattipakorn N, Watcharasakul K, Lord SR. Effects of Tai Chi on cognition and fall risk in older adults with mild cognitive impairment: a randomized controlled trial. J Am Geriatr Soc 2017;65:721-7.

Boripuntakul S, **Sungkarat S**. Specific but not global cognitive functions are associated with gait Initiation in older adults. J Aging Phys Act 2017;25:128-33.

Boripuntakul S, Lord SR, Brodie MD, Smith ST, Methapatara P, Wongpakaran N, **Sungkarat S**. Spatial variability during gait initiation while dual tasking is increased in individuals with mild cognitive impairment. J Nutr Health Aging 2014;18(3):307-12.

Davenport T, Fisher B, Reischl S, **Sungkarat S**, Cozby J, Meyer L, et al. Alteration in corticospinal excitability, talocrural joint range of motion, and lower extremity function following manipulation in non-disabled individuals. *Orthop Phys Ther Pract* 2013;25(2):97-102.

Uthaikhup S, Jull G, **Sungkarat S**, Treleaven J. The influence of neck pain on sensorimotor function in the elderly. *Arch Gerontol Geriatr* 2012;55(3):667-72.

Boripuntakul S, Kothan S, Methapatara P, Munkhetvit P, **Sungkarat S**. Short term effects of cognitive training program for individuals with amnesic mild cognitive impairment: a pilot study. *Phys Occup Ther Geriatr* 2012;30(2):138-49.

Coenen M, Cieza A, Freeman J, Khan F, Miller D, Weise A, Kesselring J, Members of the Consensus Conference: Freeman J, Kesselring J, Khan F, Kostanjsek N, Luoto E, Melvin J, Singhal B, Stucki G, Tenenbaum S, Thompson A, Anderseck B, Cáceres FJ, Chitnis S, Flachenecker P, Freeman J, Govaerts M, Hassan A, Izzeldin A, Hinrichs J, Hoang P, Jansa J, Khan F, Lexell EM, Miller D, Guiteras MR, **Sungkarat S**, et al. The development of ICF core sets for multiple sclerosis: results of the international consensus conference. *J Neurol* 2011;258(8):1477-88.

Sungkarat S, Fisher B, Kovindha A. Efficacy of an insole shoe-wedge and augmented pressure sensor for gait training in individuals with stroke: a randomized controlled trial. *Clin Rehabil* 2011;25:360-9.

Onlaor S, Winstein CJ. Determining the optimal challenge point for motor skill learning in individuals with moderately severe Parkinson's disease. *Neurorehabil Neural Repair* 2008;22:385-95.

Shohamy D, Myers CE, **Onla-or S**, Gluck MA. Role of the basal ganglia in category learning: how do patients with Parkinson's disease learn?. *Behav Neurosci* 2004;118:676-86.

Myers CE, Shohamy D, Gluck MA, Grossman S, **Onla-or S**, Kapur N. Dissociating medial temporal and basal ganglia memory systems with a latent learning task. *Neuropsychologia* 2003;41:1919-28.

Onla-or S, Winstein CJ. Function of the “direct” and “indirect” pathways of the basal ganglia motor loop: evidence from reciprocal aiming movements in Parkinson’s disease. *Brain Res Cogn Brain Res* 2001;10:329-32.

Pohl PS, Winstein CJ, **Onla-or S**. Sensory-motor control in the ipsilateral upper extremity after stroke. *Neurorehabilitation* 1997;9:57-69.

National publications:

Maiaarin S, **Sungkarat S**, Kamnardsiri T, Boripuntakul S. Increased spatiotemporal variability during unplanned gait speed transition in older adults with mild cognitive impairment. *JAMS* 2021; 54:17-25.

Puipanichsiri P, **Sungkarat S**, Boripuntakul S, JinajinS, Tanakietpinyo S, Nantachai G, Ruangrukrien B. Comparison of the effectiveness of fall prevention training programs in healthy elderly. *J Gerontol Geriatr Med* 2020; 19:47-63.

Sittichoke C, Boripuntakul S, Worakul P., **Sungkarat S**. Effects of cognitive training on fall risk and cognitive performance in individuals with mild cognitive impairment. *JAMS* 2020; 53:92-99.

Chuattrakoon B, Uthaikhup S, Pichaiya T, **Sungkarat S**. Relationship between cognition, disease severity and balance performance in individuals with chronic obstructive pulmonary disease. *JAMS* 2019;52:131-7.

Wannaprom N, **Sungkarat S**, Uthaikhup S. Change in gait speed using the timed 10 meter walk test in individuals with neck pain. *JAMS* 2018;51:1-5.

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(3):605-16.

Phirom K, Sanglah C, **Sungkarat S**. Relationship between Physiological Profile Assessment (PPA) and Berg Balance Scale (BBS) scores in patients with stroke. *J Assoc Med Sci* 2017; 50(3):587-96.

Boripuntakul S, **Sungkarat S**, Parameyong A, Ponljaroen P. Immediate effects of cold on balance and proprioception in Thai healthy older adults. *J Assoc Med Sci* 2017;50(2):217-26.

Sungkarat S, Uthaikhup S, Kaewsutthi M, Charoenlimprasert J, Kaewsanmuang S. Intra- and inter-rater reliability of the Stroke Rehabilitation Assessment of Movement (STREAM). J Assoc Med Sci 2017;50(1):71-86.

Boripuntakul S, Lord SR, **Sungkarat S**. Unplanned stopping strategy in individuals with mild cognitive impairment. Walailak J Sci & Tech 2017;14(1):35-42.

Saenphan W, **Sungkarat S**, Boripuntakul S, Watcharasaksilp K. Effects of home-based Tai Chi training on balance in older adults with mild cognitive impairment. Bull Chiang Mai Assoc Med Sci 2016;49(1):123-33.

Namkhum S, Watcharasaksilp K, **Sungkarat S**. Comparisons of gait characteristics during obstacle crossing at different heights between older adults with and without mild cognitive impairment. Bull Chiang Mai Assoc Med Sci 2015;48(3):204-13.

Panachamnong N, Methapatara P, **Sungkarat S**, Taneyhill K, Intasai N. Clusterin as a blood biomarker for diagnosis of mild cognitive impairment and Alzheimer's disease. Chiang Mai University. J Natural Sciences 2014;13(3):331-334.

Kumfu S, Silsupadol P, **Sungkarat S**. Effect of executive function and attention on gait in individuals with mild cognitive impairment. Thai Phys Ther 2011;34(1):12-23.

Sungkarat S, Methapatara P, Taneyhill K, Apiwong R. Sensitivity and specificity of seven minute screen (7MS) Thai version in screening Alzheimer's disease. J Med Assoc Thai 2011; 94(7):842-8.

Chouchay S, **Sungkarat S**, Silsupadol P. Impact of footwear styles on postural control ability of female elderly. J Gerontol Geriatr Med 2010;11(1):25-35.

Boripuntakul S, **Sungkarat S**. Effects of up-and downslope walking on mean and variability of gait parameters in elderly women. Thai Phys Ther 2010;32(2):55-61.

Onla-or S, Sawasthikanontha N, Namfun T. Effects of shoe wedge use during stance and gait training on balance and gait velocity in individuals with stroke. Bull Chiang Mai Assoc Med Sci 2006;39:61-70.

Kowkerd W, Cheewapanich S, **Onla-or S**. Comparison of gait parameters in elderly women with and without balance impairment. Bull Chiang Mai Assoc Med Sci 2006;39:52-60.

Onla-or S, Sawasthikanontha N. Effects of symmetrical body-weight distribution training on balance and gait in individuals with stroke. Thai Phys Ther 2005;27(3):39-51.

Onla-or S, Saksri P, Chaimongkol N. Effects of home exercise and stretching program on balance ability of elderly women. J Gerontol Geriatr Med 2004;5:11-8.

Onla-or S, Saksri P, Wongyai A. Effects of Tai Chi exercise on functional mobility in elderly. J Gerontol Geriatr Med 2003;4:12-8.

ABSTRACTS (Proceeding conference)

- Winstein, C.J. & **Onla-or, S**. (1996). Effects of unilateral brain damage on the control of aiming movements. Abstract, Neurology Report, 20, 21.
- Winstein, C.J., Fisher, B.E., & **Onla-or, S**. (1997). Response variability of goal-directed voluntary arm movements: Pathology or flexibility? Abstract, Journal of Sport and Exercise Psychology, 19 (Suppl.), 20.
- Winstein, C.J., **Onla-or, S.**, & Sullivan, K.J. (1997). Deficits in movement-related information processing post-stroke: A kinematic analysis. Abstract, Society for Neuroscience, 23, 2373.
- **Onla-or, S**. & Winstein, C.J. (1998). Relationship between “Programming” and “Execution” of movement in individuals with severe Parkinson’s Disease with pharmacological treatment. Abstract, Neurology Report, 22, 177
- **Onla-or, S**. & Winstein, C.J. (1999). Context-specificity and generalizability of motor learning in individuals with Parkinson’s disease: A pilot study. Abstract. Neurology Report, 23, 151.
- Shohamy, D., **Onla-or, S**. & Gluck, M.A. (2000). Category learning in Parkinson’s disease: The effect of multiple training sessions on probabilistic classification with highly discriminable categories. Abstract, Cognitive Neuroscience.
- **Onla-or, S**. & Winstein, C.J. (2000). Context-specific learning in individuals with Parkinson’s disease. Abstract, Journal of Sport and Exercise Psychology, 22, 84.
- **Onla-or, S**. (2001). Is the “unaffected arm” of stroke patient really “unaffected”? A kinematic and brain-behavior relation ship analysis. Abstract, Chiangmai Medical Bulletin, 40(3), 13.

- **Onla-or, S. (2001).** Motor learning in individuals with Parkinson's Disease. Abstract, 25 yr. Anniversary of the faculty of Associated Medical Sciences Meeting, Chiang Mai University, Chiang Mai.
- Shohamy, D., **Onla-or, S.**, & Gluck, M. (2001). How patients with Parkinson's disease learn: Analysis of strategies used to solve a cognitive category learning task. Abstract, Society for Neurosciences Meeting, San Diego.
- **Onla-or, S. (2002).** Effects of long-term use of Levodopa on goal directed reciprocal movements in individuals with Parkinson's disease. Abstract, The 20th Annual Health Science Meeting, Research Instituted for Health Sciences, Chiang Mai University.
- Myers, C.E., Shohamy, D., Grossman, S., Gluck, M.A., **Onla-or, S.**, Eby, L.A., & Sage, J. (2003). Parkinson's patients are unimpaired at probabilistic classification and reversal in a three-cue task. Abstract, Cognitive Neuroscience Society Annual Meeting, NYC, March 30 – April 1 2003.
- Kongsompong, S. & **Onla-or, S. (2003).** Quality of life of individuals with Parkinson's disease. Abstract, The 4th Annual Physical Therapy Meeting, Chulalongkorn University, BKK, Oral Presentation, April 28-29, 2003.
- **Onla-or, S.** & Moolsawasdee, N. (2004). Effects of symmetrical body weight distribution training on balance and gait in individuals with stroke. Abstract, The 5th Annual Neurophysical Therapy Meeting, Mahidol University, BKK, Oral Presentation, April 28-29, 2004.
- **Sungkarat, S.** & Kovindha, A. (2008). Efficacy of an Insole Shoe-wedge and Augmented Pressure Sensor during Gait Training for Individuals with Stroke: A Preliminary Study. Abstract, Chiang Mai University Academic Days: The 4th Annual Meeting: Innovation for Life, Poster Presentation, December 19-20, 2008.
- **Sungkarat, S. (2009).** Determining the optimal challenge point for motor skill learning in individuals with moderately severe Parkinson's disease. Abstract, Best practice in geriatric physical therapy: Falling assessment and intervention; 25yr Anniversary of Physical Therapy, Chiang Mai University, Oral Presentation, March 10-13, 2009.
- **Sungkarat, S.**, Methapatara, P., Taneyhill, K., & Apiwong, R. (2009). Development of the screening methods for Alzheimer's disease. Abstract, Chiang Mai University Academic Days: The 5th Decade toward the University of Excellence, Poster Presentation, November 26-27, 2009.
- **Sungkarat, S.**, Methapatara, P., & Apiwong, R. (2010). A screening test for Alzheimer's Disease: Sensitivity and Specificity of 7-Minute Screen Thai Version. Abstract, Annual Meeting of Thai Society and Geriatric Medicine: Practical Management, Caring and Supporting in Older Adults, Oral Presentation, January 20-22, 2010.

- **Sungkarat, S.**, Kothan, S., Methapatara, P., Munkhetvit, P., & and Boripuntakul, S. (2010). Development and Efficacy of Cognitive Training Program for Individuals with Mild Cognitive Impairment: Evidence from Biomarker Analysis in Brain by Magnetic Resonance Spectroscopy and Cognitive Skills. Abstract, Annual Academic Meeting of the Faculty of Associated Medical Sciences, Chiang Mai University, Chiang Mai. Poster presentation, December 1-3, 2010.
- **Sungkarat, S.**, Uthaikhup, S., Khamsaen, K. (2012). The Influence of Neck Pain on Gait. Abstract, IFOMPT 2012, The World Congress of Manual/Musculoskeletal Physiotherapy, Quebec City, Canada. Poster presentation, September 30-October 5, 2012.
- **Sungkarat, S.**, Boripuntakul, S., Lord, S., Methapatara, P., Wongpakaran, N. (2012). Effects of Dual-task on Gait Initiation in Individuals with Mild Cognitive Impairment. Abstract, The Asian Physical Therapy symposium, Mahidol University, Bangkok, Thailand, Oral presentation, September 6-7, 2012.
- **Sungkarat, S.**, Uthaikhup, S., Silsupadol, P. (2014). Physiological and Functional Factors Predicting Recurrent Falls in Community-Dwelling Older Adults. The International Physical Therapy Conference 2014, Chiang Mai, Thailand. Poster presentation, July 27, 2014.
- Thanakkhasaranee, W., **Sungkarat, S.** (2014). Effects of Tai Chi Training on Physiological Factors Associated with Falls in Older Adults with Mild Cognitive Impairment. Proceeding, International Graduate Conference (iGRC) 2014, Chiang Mai, Thailand. Oral presentation, December 12, 2014.
- Namkhum, S. **Sungkarat, S.** Chamnongkich, S. (2015). Comparisons of Gait Characteristics during Obstacle Crossing at Different Heights between Older Adults with and without Mild Cognitive Impairment. Academic Celebration on the 40th Years in Establishment of the AMS Faculty: Annual Academic Meeting 2015, Faculty of Associated Medical Sciences, Chiang Mai, Thailand, Poster presentation, November 25-27, 2015
- Saenphan, W., Watchalasaksilp, K., Boripuntakul, S., **Sungkarat, S.** (2015). Effects of Home-based Tai Chi on Balance in Older Adults with Mild Cognitive Impairment. Academic Celebration on the 40th Years in Establishment of the AMS Faculty: Annual Academic Meeting 2015, Faculty of Associated Medical Sciences, Chiang Mai, Thailand, Poster presentation, November 25-27, 2015.
- **Sungkarat, S.**, Uthaikhup, S., Kaewsutthu, M., Charoenlimprasert, J., Kaewsanmuang, S. (2017). Intra- and inter-rater reliability of the Stroke Rehabilitation Assessment of Movement (STREAM). AMS conference 2017, Chiang Mai, Thailand, Poster presentation, February 8-10, 2017.

- **Sungkarat, S.**, Boripuntakul, S., Buasord, J., Sittichoke, C. (2017). Comparisons of balance and gait characteristics of older adults while walking on absorbing floor and rigid floor. AMS conference 2017, Chiang Mai, Thailand, Poster presentation, February 8-10, 2017.
- Sittichoke, C., Boripuntakul, S., Saenphan, W., **Sungkarat, S.** (2018). Home-based Tai Chi exercise improves quality of life in individuals with amnesic mild cognitive impairment. AMS conference 2018, Chiang Mai, Thailand, Poster presentation, February 5-7, 2018.
- Chuatrakoon, B., Uthaikhup, S., Ngai, S., **Sungkarat, S.** (2018). Physiological Factors Associated with Fall Risk in Individuals with Chronic Obstructive Pulmonary Disease (COPD). 11th Pan-Pacific Conference on Rehabilitation, The Hong Kong Polytechnic University, Hong Kong, November 16-18, 2018.
- Phirom, K., Kamnardsiri, T., **Sungkarat, S.** (2019). Effects of combined physical-cognitive training program on fall risk in older adults. AMS conference 2019, Chiang Mai, Thailand, Poster presentation, December 6-8, 2019.
- Wichayanrat, W., Boripuntakul, S., **Sungkarat, S.** (2022). Body and brain fit: The benefit of cardiovascular fitness on cognitive performances in middle-aged obese women. World Physiotherapy Asia Western Pacific (AWP) Regional Congress with Hong Kong Physiotherapy Association (HKPA) Conference 2022, Virtual conference, Oral presentation, June 18-20, 2022.
- Keawtep, P., Wichayanrat, W., Boripuntakul, S., Worakul, P., **Sungkarat, S.** (2022). The effect of dietary restriction on cognitive performances and cardiometabolic risk factors in postmenopausal obesity: A preliminary report of a randomized clinical trial. World Physiotherapy Asia Western Pacific (AWP) Regional Congress with Hong Kong Physiotherapy Association (HKPA) Conference 2022, Virtual conference, Poster presentation, June 18-20, 2022.
- **Sungkarat, S.**, Boripuntakul, S., Apaijai, N., Worakul, P., Chattipakorn, S. The effects of combined physical-cognitive training on cognitive function of individuals with mild cognitive impairment (MCI): A randomized controlled trial", The 13th Pan-Pacific Conference on Rehabilitation: Health and Well-being Beyond the Era of New Normal, Poster presentation, November 23-24, 2023.

RESEARCH GRANTS

Principle Investigator:

2004-2005	Associated Medical Sciences Research Grant Project “Effects of Symmetrical Body-Weight Distribution Training on Balance and Gait in Individuals with Stroke”
2005-2006	Chiang Mai University New Researcher Grant Project “Effects of Shoe Wedge Use during Stance and Gait Training on Balance and Gait in Individuals with Stroke”
2007-2009	Thailand Research Fund and Office of the Higher Education Commission Grant Project “Development and Efficacy of an Inserted Shoe-Wedge with Pressure Sensor during Gait Training on Gait and Balance in Individuals with Stroke”
2008-2009	National Research Council of Thailand (NRCT) Project “Development of the Screening Methods for Alzheimer’s Disease”
2010-2011	Biomedical Engineering Center Research Grant, Chiang Mai University Project “Development and Efficacy of Cognitive Training Program for Individuals with Mild Cognitive Impairment: Evidence from Biomarker Analysis in Brain by Magnetic Resonance Spectroscopy and Cognitive Skills”
2011-2012	National Research Council of Thailand (NRCT) Project “Allied Health Sciences for Diagnosis, Management and Care of Elderly with Dementia”
2013-2015	Thailand Research Fund (Research Grant for Mid-Career University Faculty) Project “A randomized controlled trial of mind-body exercise: Effects of a 6-month Tai Chi exercise on cognition and blood biomarkers of individuals with mild cognitive impairment (MCI)”
2016-2017	The Siam Cement Public Company Limited (SCG) –Innovation and Technology Project “Comparisons of Balance and Gait Characteristics of Elderly while Walking on Shock Absorbing Flooring and Vinyl Flooring”
2017-2018	Associated Medical Sciences Research Grant Project “Physiological factors related to balance impairment and falls in Individuals with Chronic Obstructive Pulmonary Disease (COPD)”
2017-2019	Thailand Science Research and Innovation (TSRI) Project “Development of a virtual, interactive physical-cognitive game-based training program for reduction of falls and dementia risk”
2018-2021	Thailand Science Research and Innovation (TSRI) Project “Synergistic effects of combined physical-cognitive training on cognitive function in individuals with mild cognitive impairment (MCI): A randomized controlled trial”

2021-2022	Associated Medical Sciences Research Grant 2021 Project "The effects of combined physical-cognitive exercise with dietary intervention on cognitive function and underlying mechanisms of obese postmenopausal women: A pilot study"
2022-2023	Fundamental Fund 2022, National Research Council of Thailand (NRCT) Project "A randomized controlled trial investigating the effects of combined physical-cognitive exercise and dietary intervention on cognitive performance and changes in blood biomarkers of postmenopausal obese women"
2022-2023	Associated Medical Sciences Research Grant 2022 Project "Development of a home-based exergame system to promote physical and cognitive health of older adults using computer vision"
2023-2026	Thailand Science Research and Innovation (TSRI) Project "Effects of low-intensity exercise on cognitive function, blood biomarkers, and metabolomic alterations of older adults at risk of developing dementia"

Co-investigator:

2005-2006	Thai Health Promotion Foundation Project "Effects of cell phone conversation on driving performance"
2007-2008	Transcranial Magnetic Stimulation Laboratory Fellowship, University of Southern California, Los Angeles, USA. Project "Alteration in Cortical Motor Excitability Following Ankle Joint Manipulation"
2008-2009	National Science and Technology Development Agency (NSTDA) Project "Invention of insole sensor for measurement of foot pressure during stance and gait"
2010-2011	Chiang Mai University New Researcher Grant Project "The influence of neck pain on sensorimotor function in elderly patients"
2010-2011	National Research Council of Thailand (NRCT) Project "National Research Project Management (NRPM) for Health Science"
2011-2012	Associated Medical Sciences Research Grant Project "Are dividing attention and allocating attention during sitting correlated with dual-task gait performance in older adults?"
2011-2012	Associated Medical Sciences Research Grant Project "Effects of Sit-to-Stand Home-Based Exercise on Muscle Performance, Physical Performance and Quality of Life in the Elderly"
2012-2013	Associated Medical Sciences Research Grant

	Project “Physiological Factors Associated with Fall and Functional Ability in Thai - Dwelling Elderly”
2013-2014	Associated Medical Sciences Research Grant Project “Effects of Physiological Factors and Functional Ability on Recurrent Falls in the Elderly”
2014-2015	Department of Medical Services Grant Project “The Development of Model for Physical Rehabilitation of Patients Recovering from Cerebrovascular Disease in Health Promoting Hospital”
2017-2019	National Research Council of Thailand (NRCT) Project “Effectiveness of falls prevention training program in Thai elderly”
2018-2019	National Research Council of Thailand (NRCT) –Graduate Study Project “Assessment and Management of Balance Impairment and Fall Risk in Individuals with Chronic Obstructive Pulmonary Disease (COPD)”
2019-2020	Thailand Science Research and Innovation (TSRI) Project “Comparison of gait variables during transitional gait speed during single and dual-task conditions between individuals with and without Mild Cognitive Impairment”
2020-2021	Chiang Mai University Research Grant Project “Modern Management and Information Technology Research Group”
2023-2024	Associated Medical Sciences Research Grant Project “Feasibility of physical-cognitive exercise via telerehabilitation for health benefits of stroke survivors”

RESEARCH ETHICS, GCP and OTHER RELEVANT TRAINING

- Guidelines for IRB review and ethical issues in research, Research Institute for Health Sciences, Chiang Mai, February 2008.
- GCP-based investigator training program workshop, Research Institute for Health Sciences, Chiang Mai, May 2008.
- International course on surveying and evaluating ethical review practices programme, SIDCER, Research Institute for Health Sciences, Chiang Mai, July 2008.
- WHO-TDR SIDCER-FERCAP-FERCIT training course for standard operating procedures IEC/IRB recognition program, Faculty of Medicine, Thammasart University, March 2010.
- International course on surveying and evaluating ethical review practices programme, SIDCER-FERCAP, Faculty of Medicine, Chiang Mai University, June 2011.
- FERCAP surveyor training update, Faculty of Medicine, Chulalongkorn University, September 22, 2013.

- Local surveyor, SIDCER survey, Faculty of Nursing, Chiang Mai University, September 26-28, 2013.
- FERCAP surveyor training update, Faculty of Medicine, Chiang Mai University, March 8, 2015.
- Local surveyor, SIDCER survey, Central Research Ethics Committee (CREC), Bangkok, March 12-14, 2015.
- "Human Subject Protection Course" Forum for Ethical Review Committees in Thailand (FERCIT), Faculty of Medicine, Chulalongkorn University, May 23-24, 2016.
- NECAST surveyor, Regional Research Ethics Committee (RREC), Naresuan University, Pitsanuloke, September 7-9, 2017.
- Good Clinical Practice (GCP) training course, Chiang Mai University, July 5-6 2018.
- Human research ethics. Chiang Mai University, July 4-5, 2019.
- Update NECAST-SIDCER Surveyor 2020. Miracle Grand Hotel, Bangkok, January 18-19, 2020.
- SIDCER-FERCAP survey and evaluation of ethical review practices, Faculty of Nursing, Chiang Mai University Research Ethics Committee, August 26-29, 2020.
- Training program for research ethics committee members with special reference to GCP and US regulations, Faculty of Medicine, Chiang Mai University, March 31-April 1, 2021.
- Good Clinical Practice (GCP) training and Human Subject Protection course, Faculty of Medicine, Chiang Mai University, July 15-16 2021.
- FERCAP Update Training on Online/Virtual Survey on September 11, 2021.
- Safety Monitoring and Reporting in Clinical Trials, Faculty of Medicine, Chiang Mai University, October 31, 2022.
- Good Clinical Practice (GCP) training, National Research Council of Thailand (NRCT) and Forum for Ethical Review Committee in Thailand (FERCIT), October 25-27, 2023.
