

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



PERSONAL INFORMATION

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EDUCATION

2001 Doctor of Philosophy in Biokinesiology
University of Southern California, Los Angeles, CA, USA

1996 Master of Science in Biokinesiology and Physical Therapy
University of Southern California, Los Angeles, CA, USA

1991 Bachelor of Science in Physical Therapy (Hons)
Chiang Mai University, Chiang Mai, Thailand

POSITIONS AND APPOINTMENTS

2024-present Head of Neurologic Physical Therapy, Department of Physical Therapy,
Faculty of Associated Medical Sciences, Chiang Mai University

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 Award**, Department of Biokinesiology and Physical Therapy from Ph.D. Students, University of Southern California, 2001
- **Research Travel Grant Award**, Office of The Higher Education Commission of Thailand to visit institutions in North America under the project entitled: Neurorehabilitation: from evidence to practice, 2005
- **World Health Organization (WHO) Travel Grant Award**, Thai Physical Therapist representative at The International ICF Core Sets Consensus Conference for Multiple Sclerosis at Valens Rehabilitation Centre, Switzerland, 2008
- **Good Poster Presentation Award** – 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, Chiang Mai, Thailand, 2008
- **Best Poster Presentation Award** –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, Chiang Mai, Thailand, 2023
- **Outstanding Research Award**, Division of Physical Therapy, Faculty of Associated Medical Sciences, Chiang Mai University, 2016, 2017, and 2023
- **Highest Impact Factor Publication Award**, Division of Physical Therapy, Faculty of Associated Medical Sciences, Chiang Mai University, 2014, 2016, 2017, and 2024
- **Best Poster Presentation Award** – Cognitive effects of home-based, low-intensity exergaming in older adults with mild cognitive impairment: A randomized controlled trial”, The 17th Asian Confederation for Physical Therapy (ACPT) Congress, Suwon, South Korea, 2026

RESEARCH INTEREST

- Motor Control and Learning
- Neurorehabilitation (Balance and Gait)
- Exercise, Physical and Brain Health in Older Adults

PROFESSIONAL MEMBERSHIP

- International Parkinson and Movement Disorder Society
- Thai Physical Therapy Association
- Asian Falls Network

EDITORIAL BOARD

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

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)

INNOVATIONS (CMU-RL 4-7)

Better Brain Gain Balance (Kinect exergames)

Brain and Body Fit (Computer vision-based low-intensity exergames)

PUBLICATIONS (peer-reviewed)

International publications:

Keawtep P, Boripuntakul S, Sa-nguanmoo P, Jearjaroen P, Sittichoke C, Kamnardsiri T, Sinthamrongruk T, **Sungkarat S.** Effects of web-based physical–cognitive telerehabilitation exergaming on physical and cognitive performance in chronic stroke survivors: protocol for a randomized controlled trial. J Clin Med. 2026; 15(8):2945. doi.org/10.3390/jcm15082945

Kumfu S, Kamnardsiri T, Boripuntakul S, **Sungkarat S.** Feasibility of home-based, low-intensity exergame on cognitive function of older adults with mild cognitive impairment. Digit Health. 2025;11:20552076251408519. doi: 10.1177/20552076251408519.

Kumfu, S., **Sungkarat, S.**, Boripantakul, S. *et al.* Effects of home-based, low-intensity exergaming on cognitive function of individuals with mild cognitive impairment: a study protocol for a randomized controlled trial. BMC Geriatr. 2025; 25(1):408. doi.org/10.1186/s12877-025-06054-w

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;21(1):28. doi: 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;19(1):e0296710. doi: 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;14:21501319231189961. doi: 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; 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;19(20):13364. doi: 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;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, Uthai khup 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. 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;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**, Siviroj 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, Siviroj 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**, Siviroj 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, Siviroj 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, Siviroj 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, Watcharasaksilp 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:

Maiairin 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, Jinajin S, 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.

Chuatrakoon 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.

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

2017-2019	Project “Physiological factors related to balance impairment and falls in Individuals with Chronic Obstructive Pulmonary Disease (COPD)”
	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”
	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”
	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)

2011-2012	Project “National Research Project Management (NRPM) for Health Science” 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”
2025-2026	Thailand Science Research and Innovation (TSRI) Project “The effects of combined physical-cognitive exergaming via telerehabilitation platform with artificial Intelligence (AI)-based pose estimation on physical and cognitive performance in chronic stroke survivors: a randomized controlled trial”

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.
- Research Integrity, National Research Council of Thailand (NRCT), July 25, 2025.
- Good Clinical Practice (GCP) training course- Social and behavioral research best practices for clinical research. CITI Program, November 18, 2025.