



มหาวิทยาลัยศรีนครินทรวิโรฒ
คณะกายภาพบำบัด

ประวัติและผลงานอาจารย์

ชื่อ-นามสกุล (ภาษาไทย) รัมภา บุญสินสุข

ชื่อ-นามสกุล (ภาษาอังกฤษ) Rumpa Boonsinsukh

การศึกษา

ปีที่จบ	สถาบัน/ประเทศ	วุฒิการศึกษา
2537	มหาวิทยาลัยมหิดล ประเทศไทย	วท.บ.(กายภาพบำบัด)
2539	Curtin University/Australia	Postgraduate diploma (PT)
2546	McGill University/Canada	Ph.D.(Rehabilitation Science)
2554	OHSU, USA	Postdoctoral fellow
2560	University of Montana, USA	Doctor of Physical Therapy

ความเชี่ยวชาญ

Postural Control, Stroke rehabilitation, Neurological rehabilitation

ผลงานวิจัย

International level (26)

1. Nithiatthawanon T, Saenkap P, Arnthong S, Satheanpong J, Kumjai A, Phantachang P, Chaikereee, N, **Boonsinsukh R.** (2025) Concurrent validity and accuracy of wrist-wearable devices to track heart rate during exercise in sedentary individuals. *Journal of Associated Medical Sciences*, 58 (1): 160-166.
2. Wangthomrong L, **Boonsinsukh R,** Wannapakhe J. (2024) Developing cerebral palsy screening of functional abilities in school (CPS-FAS). *Siriraj Medical Journal* 76(8): 497-503.
3. Krootnark K, Chaikereee N, Saengsirisuwan V, **Boonsinsukh R.** (2024) Effect of low intensity home-based exercise on cognition in older persons with mild cognitive impairment: a direct comparison of aerobic versus resistance exercises using a randomized controlled trial design. *Frontiers in Medicine*. 11: 1392429.



ตำแหน่งวิชาการ

รองศาสตราจารย์

Professor,

Senior Fellow (UK-PSF)

E-Mail

rumpa@g.swu.ac.th



4. Madsalae T, Thongprong T, Chinkulprasert C, **Boonsinsukh R** (2024) Changes in gait performances during walking with head movement in older adults with chronic neck pain. *Frontiers in Medicine*. 11: 1324375.
5. Pumpho A, Kaewsanmung S, Kaewduengdee P, Suwannarat P, **Boonsinsukh R** (2023) Development of a mobile application for assessing reaction time and TUG duration: concurrent validity in female older adults. *Frontiers in Medicine*. 10: 1076963.
6. Madsalae T, Thongprong T, Chinkulprasert C, **Boonsinsukh R** (2022) Can the balance evaluation systems test be used to identify system-specific postural control impairments in older adults with chronic neck pain? *Frontiers in Medicine*. 9: 1012880.
7. Moison G, Chayasit P, **Boonsinsukh R**, Nester CJ, Hollands K (2022) Postural control during quiet standing and voluntary stepping response tasks in individuals post-stroke: a case-control study. *Topics in Stroke Rehabilitation*. 29(7): 465-472.
8. Rattanavichit Y, Chaikereee N, **Boonsinsukh R**, Kitiyanant K (2022) The age differences and effect of mild cognitive impairment on perceptual-motor and executive functions. *Frontiers in Psychology*. doi: 10.3389/fpsyg.2022.906898
9. Winairuk T, Chaikereee N, Sirisup S, Saengsirisuwan V, Boonsinsukh R (2022) Classification of limb and mobility impairments in persons with stroke using the STREAM. *Journal of Neurological Physical Therapy* 46(2): 96-102.
10. Chayasit P, Hollands K, Hollands M, Boonsinsukh R (2022) Immediate effect of voluntary-induced stepping response training on protective stepping in persons with chronic stroke: a randomized controlled trial. *Disability and Rehabilitation* 44(3): 420-427.
11. Moison G, Chayasit P, Boonsinsukh R, Nester CJ, Hollands K (2021) Postural control during quiet standing and voluntary stepping response tasks in individuals post-stroke: a case-control study. *Topics in Stroke Rehabilitation*. 25: 1-8.
12. Yuenyongchaiwat K and Boonsinsukh R (2021) Type 2 Diabetes Mellitus related to decreased peripheral and respiratory muscle strength in sarcopenic Thai



- elderly. *Current Aging Science* Jul 15. doi: 10.2174/1874609814666210715141903.
13. Yuenyongchaiwat K and Boonsinsukh R (2020) Sarcopenia and its relationships with depression, cognition and physical activity in Thai community-dwelling older adults. *Current Gerontology and Geriatric Research*. Volume 2020 ID 8041489; 1-6. Doi: 10.1155/2020/8041489.
 14. Chayasit P, Hollands K, Hollands M, Boonsinsukh R (2020) Characteristics of voluntary-induced stepping responses in persons with stroke compared with those of healthy young and older adults. *Gait and Posture* 82; 75-82.
 15. Boonsinsukh R, Khumnonchai B, Saengsirisuwan V, Chaikereee N (2020) The effect of the type of foam pad used in the modified Clinical Test of Sensory Interaction and Balance (mCTSIB) on the accuracy in identifying older adults with fall history. *Hong Kong Physiotherapy Journal* 40 (2); 1-11.
 16. Pumpo A, Chaikereee N, Saengsirisuwan S and Boonsinsukh R (2020) Selection of better Dual-Timed Up and Go cognitive task to be used in patients with stroke characterized by subtraction operation difficulties. *Frontiers in Neurology*. 11.262. doi: 10.3389/fneur.2020.00262
 17. Winairuk T, Pang MC, Saengsirisuwan V, Horak FB and Boonsinsukh R. (2019) Responsiveness of 3 short-form Balance Evaluation Systems Tests (BESTests); S-BESTest, Brief-BESTest and Mini-BESTest, in people with subacute stroke. *Journal of Rehabilitation Medicine* 51: 683-691.
 18. Chaikereee N, Chinsongkram B, Saengsirisuwan V, Boonsinsukh R (2018) Effect of cognitive dual task on components of 7 meter timed up and go test in persons with stroke. *ScienceAsia* 44: 247-256.
 19. Chinsongkram B, Chaikereee N, Saengsirisuwan V, Boonsinsukh R (2016) Responsiveness of the balance evaluation system test (BESTest) in persons with stroke. *Physical Therapy* 96(10): 1638-1647.
 20. Yingyongyudha A, Saengsirisuwan V, Panichaporn W, Boonsinsukh R (2016) The Mini-Balance Evaluation System Test (Mini-BESTest) demonstrates higher accuracy in identifying older adult participants with history of falls than do the BESTest, Berg Balance Scale or Timed Up and Go test. *J Geriatr Phys Ther* 39(2): 64-70.



21. Chikeeree N, Saengsirisuwan V, Chinsongkram B, Boonsinsukh R (2015) Interaction of age and foam types used in Clinical Test for Sensory Interaction and Balance (CTSIB). *Gait and Posture* 41(1): 313-5.
22. Chinsongkram B, Chikeeree N, Viriyatharakij N, Saengsirisuwan V, Horak FB, Boonsinsukh R (2014) Reliability and validity of the Balance Evaluation Systems Test (BESTest) in people with subacute stroke. *Physical Therapy* 94: 1632-1643.
23. Charoenpanich N, Boonsinsukh R, Sirisup S, Saengsirisuwan V. (2013) Principal component analysis identifies major muscles recruited during elite vertical jump. *ScienceAsia* 39: 257-264.
24. Boonsinsukh R, Saengsirisuwan V, Carlson-Kuhta P, Horak FB. (2012) A cane improves postural recovery from an unpracticed slip during walking in people with Parkinson's disease. *Physical Therapy* 92: 1117-1129.
25. Boonsinsukh R, Panichareon L, Saengsirisuwan V, Phansuwan-Pujito P. (2011) Clinical identification for the use of light touch cues with a cane in gait rehabilitation post-stroke. *Topics in Stroke Rehabilitation* 18(5): 633-642.
26. Boonsinsukh R, Panichareon L, Phansuwan-Pujito P (2009) Light touch cue through a cane improves pelvic stability during walking in stroke. *Archives of Physical Medicine and Rehabilitation* 90:6, 919-26.

National level (16)

1. Nithiatthawanon T, Chaikereee N, Boonsinsukh R. (2023) Concurrent validity and accuracy of arm-wearable devices to detect heart rate during exercise: A systematic review. *J Med Health Sci*; 30: 80-103
2. Rattanavichit Y, Chaikereee N, Boonsinsukh R, Wittana K, Maengsombut P, Teachachaisakul P, Locaapichai H. (2020) Mini-Balance Evaluation Systems Test (Mini-BESTest) in Thai version: translation with rater reliability and concurrent validity in older adults. *Thai Journal of Physical Therapy* 42(3): 174-185.
3. Chinsongkram B, Pluempitiwiriyawej S, Hongthong S, Boonsinsukh R (2020) Reliability of the modified O' Sullivan Functional Balance Test in persons with spinal cord injury. *Journal of Food Health and Bioenvironmental Science*. 13 (2).



4. Pisalayon T, Saengsirisuwan V, Pumpho A, Chaikereee N, Boonsinsukh R (2018) Effect of combined mental tracking dual-task during walking on gait speed and cognitive performance in stroke patients. *Journal of Physiological and Biomedical Sciences*. 31(2): 63-69.
5. Yingyongyudha A, Panichaporn W, Boonsinsukh R. (2018) The Mini Balance Evaluation System Test (Mini-BESTest) for predicting recurrent fall in active older adults from 1-year prospective study. *Thai Pharmaceutical and Health Science Journal* 13(4): 164-170.
6. Nanthapaiboon K, Wannapakhe J, Viriyatarakij N, Boonsinsukh R. (2018) Internal consistency and convergent validity of the Activities-specific Balance Confidence (ABC) Scale Thai Version. *Thai Pharmaceutical and Health Science Journal* 13(1): 1-7.
7. Chaikereee N, Wannapakhe J, Boonsinsukh R, Tantiwong K, Phetchatchan N, Wongkom T, Satibut S. (2018) Stroke Rehabilitation Assessment of Movement Thai version (STREAM-TH): Translation with reliability and concurrent validity study. *Thai Journal of Physical Therapy* 40: 16-24.
8. Wannapakhe J, Boonsinsukh R, Chuchredlersirikul C, Sakarung N, Sukata S (2017) Opinions of Srinakharinwirot University students and physical therapists who have the knowledge of the Stroke Rehabilitation Assessment of Movement (STREAM) on the implementation of this scale in clinical practice. *Thai Journal of Physical Therapy* 39: 1-10.
9. Rakyoo C, Hiransinsoonthorn B, Nuang-nieo A, Boonsinsukh R (2013) Comparison of time spent during Timed Up and Go Test with naming or arithmetic calculation in Thai elderly. *Thai Journal of Physical Therapy* 35: 109-118.
10. Chewwasung C, Boonsinsukh R, Bannarat S, Thumpapong K, Meesukh P (2011) Comparison of Vastus medialis, Semitendinosus, Tibialis anterior, Peroneus longus and Gastrocnemius muscle activities between forward and backward walking *Thai Journal of Physical Therapy* 33:1, 10-16.
11. Wawsungnoen S, Mesattee P, Thongsombatpanich C, Chaikereee N, Boonsinsukh R (2010) The Development of width-adjustable body weight



- support system for gait training. Thai Pharmaceutical and Health Science Journal 5(1): 45-53.
12. Chalermchai K, Jusanit C, Pasarathon N , Tevaboon S, Pisarnpluek O, Meechai W, Boonsinsukh R (2009) Effect of light touch on Postural Control during walking with narrow base of support in the elderly. Thai Pharmaceutical and Health Science Journal 4(2), 208-216.
 13. Boonsinsukh R, Siriploy J, Boonsumrej D, Hunsapun N (2007) Development of low-cost wheelchair seat cushion. Journal of Allied Health Sciences 7:2, 23-35.
 14. Boonsinsukh R, Promjunyakul N, Chewwasung, C (2007) Effect of ageing on trunk adjustments following a rapid head turn under reduced accuracy of feet somatosensory inputs. Thai Journal of Physical Therapy 30:1, 28-37.
 15. Boonsinsukh R, Promjunyakul N, Chewwasung, C (2006) Effect of head turning during walking on postural control in the elderly. Thai Journal of Physical Therapy 29:2, 17-30.
 16. Boonsinsukh R (2004) Predictive strategies in the control of gait and posture. Thai Journal of Physical Therapy 26(1-2): 81-92.

International proceedings (3)

1. Paobthong N, Boonsinsukh R, Saengsirisuwan V, Sirisup S. (2010) Application of wavelet transform to identify motor unit recruitment pattern. Proceedings of IEEE IECBES Conference on Biomedical Engineering & Science. 30 November 2010, Malaysia.
2. Boonsinsukh R, Sirisup S, Saengsirisuwan V (2009) Recognition of Age-Related Changes in Muscle Contributions for Gait Speed Adjustments by Proper Orthogonal Decomposition. Proceeding of 4th IEEE International Symposium of Biomedical Engineering
3. Sirisup, S, Boonsinsukh, R (2007) Identification of muscle determinant for different gait speeds by proper orthogonal decomposition. Proc.Appl.Math.Mech.7, 2120021-2120022.

National proceedings (14)



1. Pimchanok Sriraksa, Rumpa Boonsinsukh, Jirabhorn Wannapakhe. (2023) Effect of home-based tele-exercise on gait speed in the elderly with diabetic peripheral neuropathy. Proceedings of the Srinakharinwirot University Research Conference and SWU Researcher Day; June 26; SWU, Bangkok, 2023: 76-83.
2. Seksit Ketto, Rumpa Boonsinsukh, Jirabhorn Wannapakhe. (2023) Effects of visual cue training on balance and gait in patients with stroke. Proceedings of the Srinakharinwirot University Research Conference and SWU Researcher Day; June 26; SWU, Bangkok, 2023: 84-92.
3. Ekkabut P, Boonsinsukh R (2022) Reliability of Mini-BESTest among elderly people with mild cognitive impairment in the community. Proceedings การประชุมบัณฑิตศึกษาระดับชาติครั้งที่ 12 วันที่ 23-24 มิถุนายน 2565 ณ มหาวิทยาลัยศิลปากร ประเทศไทย
4. Jirabhorn Wannapakhe, Nusara sangsai, Auraya Chourjarean, Asma Al-umaree, Kunlaya Sookserm, Nuttanicha Kullawut, Rumpa Boonsinsukh. (2021) Evidence based practice to compare the effect of virtual reality and conventional physical therapy on gait ability in stroke patients. Proceedings of the 14th Srinakharinwirot University Research Conference; June 24; SWU, Bangkok, 2021: 628-42.
5. Jirabhorn Wannapakhe, Wanvisa Panichaporn, Rumpa Boonsinsukh, Yupin Suppakun. (2021) A Survey of Satisfaction on Design and Apply of Mobile Application of Stroke Rehabilitation Assessment of Movement (STREAM) on Android. Proceeding of the 1st National Conference on Health Research and Innovation; March 16; Vongchavalitkul University, Nakhon Ratchasima, 2021: 51-64.
6. Thongprong T, Madsalae T, Chaikereee N, Boonsinsukh R (2021) Identification of Timed Up and Go components in elderly with chronic neck pain. Proceeding of RSU International Research Conference, 30 April 2021, Thailand.
7. Satayaprakorb K, Boonsinsukh R, Winairak T, Roongpiboonsopit D, Chaikereee N (2021) Reliability of the Stroke-Balance Evaluation Systems Test (S-BESTest) in people with chronic stroke. Proceeding of RSU International Research Conference, 30 April 2021, Thailand.



8. Naowabut K, Panichaporn W, Boonsinsukh R (2021) Reliability of the Thai Kids-Balance Evaluation Systems Test (Kids-BESTest-Th) in children with cerebral palsy. Proceeding of RSU International Research Conference, 30 April 2021, Thailand.
9. Wittaya Duengna, Rumpa Boonsinsukh, Wanvisa Panichaporn, Nithinun Chaikereee, Jirabhorn Wannapake (2019) The cut point of functional reach test for identifying risk of falls in patients with incomplete spinal cord injury. Proceeding in 4th Suan Dusit University Conference, 14 June 2019, Thailand.
10. Nantachon Rujichi, Rumpa Boonsinsukh, Chatchada Chinkulprasert. (2019) Effect of chronic low back pain and walking speed on postural control during walking. Proceeding in The 48th National Graduate Research Conference, The 9th National and International Graduate Study Conference and The 11th Silpakorn University Research Fair 2019, June 13-14, Thailand.
11. Nanthapaiboon K, Wannapakhe J, Viriyatarakij N, Boonsinsukh R. (2017) Thai translation and cross cultural adaptation of the Activities-specific Balance Confidence (ABC) Scale. Proceedings of the 1st National Conference on Health Sciences Research and Innovation: Knowledge transformation towards Thailand 4.0; Mae Fah Luang University, Chiang Rai, Thailand.
12. Khumnonchai B, Chinwaro U, Boonsinsukh R, Chaikereee N. (2017) Time to maintain standing balance on NeuroCom and AIREX foams during the Modified Clinical Test of Sensory Interaction and Balance (mCTSIB) in elderly. Proceedings of the 1st National Conference on Health Sciences Research and Innovation: Knowledge transformation towards Thailand 4.0; Mae Fah Luang University, Chiang Rai, Thailand.
13. Asipong J, Phonruksa A, Kahawong N, Boonsinsukh R, Jongkamonwiwat N. (2012) Effects of domestically invented body weight support for gait training in a patients with stroke: a case study. Proceedings การประชุมวิชาการ ศรีนครินทรวิโรฒวิชาการ ครั้งที่ 6 วันที่ 29-30 พฤษภาคม 2555.
14. Chinsongkram B, Nawarat S, Boonsinsukh R. (2012) Effect of sensory organization training in improving balance performance in stroke patients: a systematic review of randomized controlled trials. Proceedings การประชุมวิชาการ มหาวิทยาลัยรังสิต ประจำปี 2555 วันที่ 10 เมษายน 2555