

Curriculum Vitae (Updated 29/08/2026)

Name Wanalee Klomjai
Position Associate professor
Work Faculty of Physical Therapy, Mahidol University
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Scopus metrics : H-index : 12, H5-index : 7

Education

- 2011-2014 Ph.D. (Neuroscience), Graduate School of Brain, Behaviour & Cognition (3C) Sorbonne University (University of Pierre and Marie Curie -Paris 6), Paris, France.
- 2009-2011 M.Sc. (Re-education and Medical Engineering), Major in Re-education, Re-adaptation and Rehabilitation, Sorbonne University (University of Pierre and Marie Curie -Paris 6), Paris, France.
- 2004-2008 B.Sc. (Physiotherapy), Mahidol University, Bangkok, Thailand.

Positions & Working Experiences

- 2022-Present Associate professor, Faculty of Physical Therapy, Mahidol University, Thailand
- 2018-2022 Assistant professor, Faculty of Physical Therapy, Mahidol University, Thailand
- 2014-2018 Lecturer, Faculty of Physical Therapy, Mahidol University, Thailand
- 2014-Present Physical Therapist, Acute Stroke Unit, Siriraj hospital, Bangkok, Thailand
- 2015-Present Physical Therapist, Vestibular rehabilitation Clinic, ENT department, Siriraj hospital, Bangkok, Thailand

Awards

Academic award

- The major advisor role of the Distinguished Thesis Award, Mahidol University, Fiscal Year 2026 Category: Applied Health Sciences on the thesis entitled, “Effects of tele-rehabilitation using transcranial direct current stimulation with exercise on motor and sensory function and spinal motoneuron excitability in individuals with spinal cord injury”, Student name: Miss Irin Apiworajirawit, Master of Science Program in Physical Therapy (International Program), Faculty of Physical Therapy, Mahidol University
- The major advisor role of the Distinguished Thesis Award, Mahidol University, Fiscal Year 2024 Category: Applied Health Sciences on the thesis entitled, “Effects of transcranial direct current stimulation with gait training on lower limb performance in individuals with incomplete spinal cord injury”, Student name : Mr. Pipat Klamruen, Master of Science Program in Physical Therapy (International Program), Faculty of Physical Therapy, Mahidol University

Researcher awards

- Runner-up Award for the Annual Number of Publications in Scopus Q1 International Journals (3 papers), The 8th PTMU Quality Day 2026, Faculty of Physical Therapy, Mahidol University.
- Award for Academic Staff with the Highest Citation Count from an International Journal Publication within the Past Year, The 8th PTMU Quality Day 2026, Faculty of Physical Therapy, Mahidol University.
- Award for Academic Staff with the Highest Field-Weighted Citation Impact (4.41) from International Journal Publications within the Past 3 Years, The 8th PTMU Quality Day 2026, Faculty of Physical Therapy, Mahidol University.
- Award for the Highest Annual Number of Publications in Scopus Q1 International Journals, The 8th PTMU Quality Day 2025, Faculty of Physical Therapy, Mahidol University.
- Award for Academic Staff with the Highest Citation Count from an International Journal Publication within the Past Year, The 7th PTMU Quality Day 2024, Faculty of Physical Therapy, Mahidol University.
- Award for the Highest Number of Publications (3 articles) in Scopus Q1 International Journals within the Year 2022, The 6th PTMU Quality Day 2023, Faculty of Physical Therapy, Mahidol University.
- Award for Academic Staff with the Highest Field-Weighted Citation Impact from International Journal Publications within the Past 3 Years, The 6th PTMU Quality Day 2023, Faculty of Physical Therapy, Mahidol University.

- Award for Academic Staff with the Highest Total Citation Count from International Journal Publications over the Past 5 Years (2017–2021), The 5th PTMU Quality Day 2022, Faculty of Physical Therapy, Mahidol University.

Research Grants and Fundings

- 2025-2027 Awarded funding from Mahidol University to support a Ph.D student under my supervision
- 2025-2026 Grant from the Fundamental Fund 2569 for the research project titled “Effects of transcranial electrical stimulation (tES) combined with dual-task gait training on cortical activity, spinal motoneuron excitability, cognitive and motor performance in stroke people”
- 2024-2025 Grant from the Fundamental Fund 2568 for the research project titled “Effects of transcranial electrical stimulation (tES) on cortical activity, motor performances, and cognitive function in sub-acute and chronic stroke individuals”
- 2023-2025 Grant from the Faculty of Physical Therapy, Mahidol University for the research project titled “Tele-rehabilitation using transcranial direct current stimulation combined with exercise in people with spinal cord injury”
- 2023-2024 Grant from the Program Management Unit for Human Resources & Institutional Development, Research and Innovation (PMU-B), Thailand for the research project titled “Researcher development program for transcranial direct current stimulation via telerehabilitation in individuals with neurological deficits”
- 2022-2025 Awarded funding from Mahidol University to support a Ph.D student under my supervision
- 2020-2022 Grant from the Franco-Thai Mobility Program/PHC Siam (Thai and French governments research funding) for the research project titled “Combining brain and spinal cord imaging with electrophysiological investigations to evaluate effects induced by non-invasive brain stimulation (NIBS) in stroke patients”
- 2020-2021 Grant from the Program Management Unit for Human Resources & Institutional Development, Research and Innovation (PMU-B) , Thailand for the research project titled “Hemodynamic response to transcranial direct current stimulation in acute stroke”
- 2018-2019 Grant from the National Research Council of Thailand (government research funding) for the research project titled “Hemodynamic response to transcranial direct current stimulation in acute stroke”
- 2017-2018 Grant for New Researcher from Mahidol University for the research titled “The efficacy of cathodal transcranial direct current stimulation in children and adolescents with attention-deficit hyperactivity disorder.”
- 2015-2016 Grant for New Researcher from Faculty of Physical Therapy, Mahidol University for the research project titled “Dual-hemisphere transcranial direct current stimulation on lower limb motor functions after stroke.”
- 2011-2014 French Embassy Scholarship (Franco-Thai) for my Ph.D. study.

International Publications (late 5 years, all indexed in the Scopus list)

1. Apiworajirawit I, **Klomjai W**, Prathum T, Vimolratana O. Brain Activity Changes Induced by Transcranial Direct Current Stimulation in Post-Stroke Motor Recovery: A Narrative Review. Clin EEG Neurosci. 2026 Jun 12;15500594261458855. doi:[10.1177/15500594261458855](https://doi.org/10.1177/15500594261458855) (Co-author/Q2_Scopus)
2. Prathum T, Daguette J, Apiworajirawit I, Aneksan B, Hoisan S, Tragangoon A, Siripornpanich V, **Klomjai W**. Modulation of interhemispheric inhibition and motor learning by different intensities of bilateral transcranial direct current stimulation in healthy adults. Sci Rep. 2025 Dec 22;15(1):45140. (Corresponding author/Q1_Scopus)
3. Chantanachai T, Apiworajirawit I, Klamrueen P, Aneksan B, Auvichayapat P, Lackmy-Vallée A, **Klomjai W**. Tele-rehabilitation using transcranial direct current stimulation combined with exercise in people with spinal cord injury: a randomized controlled trial. J Rehabil Med. 2025 May 7;57:jrm42353. (Corresponding author/Q1_Scopus)
4. Prathum T, Chantanachai T, Vimolratana O, Laksanaphuk C, Apiworajirawit I, Aneksan B, Latthirun K, Yang C-T, **Klomjai W**. A systematic review and meta-analysis of the impact of transcranial direct current stimulation on cognitive function in older adults with cognitive impairments: the influence of dosage parameters. Alzheimers Res Ther. 2025 Feb 4;17(1):37. (Corresponding author/Q1_Scopus)
5. Sornkaew K, Thu KW, Silfies SP, **Klomjai W**, Wattananon P. Effects of combined anodal transcranial direct current stimulation and motor control exercise on cortical topography and muscle activation in

individuals with chronic low back pain: A randomized controlled study. *Physiother Res Int*. 2024 Jul;29(3):e2111. doi:[10.1002/pri.2111](https://doi.org/10.1002/pri.2111) (co-author/Q2_Scopus)

6. Vimolratana O, Aneksan B, Siripornpanich V, Hiengkaew V, Prathum T, Jeungprasopsuk W, Khaokhiew R, Vachalathiti R, **Klomjai W**. Effects of anodal tDCS on resting state eeg power and motor function in acute stroke: a randomized controlled trial. *Journal of NeuroEngineering and Rehabilitation*. 2024 Jan 3;21(1):6. (Corresponding author/Q1_Scopus)
7. Klamrueen P, Suttiwong J, Aneksan B, Muangngoen M, Denduang C, **Klomjai W**. Effects of anodal transcranial direct current stimulation with overground gait training on lower limb performance in individuals with incomplete spinal cord injury: A randomized controlled trial. *Arch Phys Med Rehabil*. 2023 Nov 3;S0003-9993(23)00606-8. (Corresponding author/Q1_Scopus)
8. Vimolratana O, Lackmy-Vallee A, Aneksan B, Hiengkaew V, **Klomjai W**. Non-linear dose response effect of cathodal transcranial direct current stimulation on muscle strength in young healthy adults: a randomized controlled study. *BMC Sports Science, Medicine and Rehabilitation*. 2023 Jan 30;15(1):10. (Corresponding author/Q1_Scopus)
9. **Klomjai W**, Aneksan B, Chotik-Anuchit S, Jitkaew P, Chaichanudomsuk K, Piriayaprasarth P, et al. Effects of Different Montages of Transcranial Direct Current Stimulation on Haemodynamic Responses and Motor Performance in Acute Stroke: A Randomized Controlled Trial. *J Rehabil Med*. 2022 Sep 13;54:jrm00331. (First and Corresponding author/Q1_Scopus)
10. **Klomjai W**, Aneksan B. A randomized sham-controlled trial on the effects of dual-tDCS “during” physical therapy on lower limb performance in sub-acute stroke and a comparison to the previous study using a “before” stimulation protocol. *BMC Sports Science, Medicine and Rehabilitation*. 2022 Apr 15;14(1):68. (First author/Q1_Scopus)
11. **Klomjai W**, Siripornpanich V, Aneksan B, Vimolratana O, Permpoonputtana K, Tretriluxana J, et al. Effects of cathodal transcranial direct current stimulation on inhibitory and attention control in children and adolescents with attention-deficit hyperactivity disorder: A pilot randomized sham-controlled crossover study. *J. Psychiatr. Res* 2022;doi:<https://doi.org/10.1016/j.jpsychires.2022.02.032>: (First author/Q1_Scopus)
12. **Klomjai W**, Giron A, Mounir el mendili M, Aymard C, Pradat-diehl P, Roche N, Katz R, Bayen E, Lackmy-Vallee A. Anodal tDCS of contralesional hemisphere modulates ipsilateral control of spinal motor networks targeting the paretic arm post-stroke. *Clin Neurophysiol* 2022;136:doi:<https://doi.org/10.1016/j.clinph.2021.12.016>:1–12. (First author/Q1_Scopus)
13. Aneksan B, Sawatdipan M, Bovonsunthonchai S, Tretriluxana J, Vachalathiti R, Auvichayapat P, Pheungphrarattanatrai A, Piriayaprasarth P, **Klomjai W**. Five-session dual-transcranial direct current stimulation with task-specific training does not improve gait and lower limb performance over training alone in sub acute stroke: A pilot randomized controlled trial. *Neuromodulation: Technology at the Neural Interface* 2021;doi:<https://doi.org/10.1111/ner.13526>: (Corresponding author/Q1_Scopus)
14. Prathum T, Piriayaprasarth P, Aneksan B, Hiengkaew V, Pankhaew T, Vachalathiti R, **Klomjai W**. Effects of home-based dual-hemispheric transcranial direct current stimulation combined with exercise on upper and lower limb motor performance in patients with chronic stroke. *Disability and Rehabilitation*. 2021 Feb 28;0(0):1–12. (Corresponding author/Q1_Scopus)

National Publication (late 5 years)

1. **Klomjai W**, Aneksan B. Transcranial direct current stimulation in individuals with stroke. *Journal of Thai Stroke Society*. 2021 Aug 24;20(2):16–16. (First and Corresponding author/TCI 2)

International & national publications (Prior to 2021)

1. Auvichayapat N, Patjanasoontorn N, Phuttharak W, Suphakunpinyo C, Keeratitanont K, Tunkamnerdthai O, Aneksan B, **Klomjai W**, Boonphongsathian W, Sinkueakunkit A, Punjaruk W, Tiamkao S and Auvichayapat P. Brain Metabolite Changes After Anodal Transcranial Direct Current Stimulation in Autism Spectrum Disorder. *Front. Mol. Neurosci*. 2020; doi: 10.3389/fnmol.2020.00070
2. Horasart A, **Klomjai W**, Bovonsunthonchai S. Immediate effect of kinesio tape on gait symmetry in patients with stroke: a preliminary study. *Human Movement*. 2019;21(1):73–81.
3. Wattananon P, **Klomjai W**, Sung W. One session of motor control exercise improves joint position sense assessed by an iPhone application: a randomized controlled trial. *J Phys Ther Sci*. 2019 Jul;31(7):583–9.

4. **Klomjai W**, Roche N, Lamy J-C, Bede P, Giron A, Bussel B, et al. Furosemide Unmasks Inhibitory Dysfunction after Spinal Cord Injury in Humans: Implications for Spasticity. *J Neurotrauma*. 2019 May 1;36(9):1469–77. (*First author/Q1_Scopus*)
5. **Klomjai W**, Aneksan B, Pheungphrarattanatrai A, Chantanachai T, Choowong N, Bunleukhet S, et al. Effect of single-session dual-tDCS before physical therapy on lower-limb performance in sub-acute stroke patients: A randomized sham-controlled crossover study. *Ann Phys Rehabil Med*. 2018 Sep;61(5):286–91. (*First & Corresponding author/Q1_Scopus*)
6. Wattananon P, **Klomjai W**. Immediate effect of lumbar stabilization exercise on lumbar position sense in healthy individuals. *J Med Tech Phy Ther* 2017;29:166-178.
7. **Klomjai W**, Katz R, Lackmy-Vallée A. Basic principles of transcranial magnetic stimulation (TMS) and repetitive TMS (rTMS). *Annals of Physical and Rehabilitation Medicine*. 2015;58(4):208–13. (*First author/Q1_Scopus*)
8. **Klomjai W**, Lackmy-Vallée A, Roche N, Pradat-Diehl P, Marchand-Pauvert V, Katz R. Repetitive transcranial magnetic stimulation and transcranial direct current stimulation in motor rehabilitation after stroke: An update. *Annals of Physical and Rehabilitation Medicine*. 2015;58(4):220–4. (*First author/Q1_Scopus*)
9. **Klomjai W**, Lackmy-Vallée A, Katz R, Bussel B, Bensmail D, Lamy J-C, et al. Changes in spinal inhibitory networks induced by furosemide in humans: Spinal excitability under furosemide. *The Journal of Physiology*. 2014;592(13):2865–79. (Dissertation) (*First author/Q1_Scopus*)
10. Lackmy-Vallée A, **Klomjai W**, Bussel B, Katz R, Roche N. Anodal transcranial direct current stimulation of the motor cortex induces opposite modulation of reciprocal inhibition in wrist extensor and flexor. *Journal of Neurophysiology*. 2014;112(6):1505–15. (Dissertation) (*Q1_Scopus*)