

## CURRICULUM VITAE

**BUSABA CHUATRAKOON, PhD., P.T.**



### PERSONAL INFORMATION

**Address:** Department of Physical Therapy  
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### ACADEMIC QUALIFICATIONS

2020 Doctor of Philosophy in Biomedical Science (International program), Chiang Mai University, Thailand.

2011 Master of Sport Science, Chiang Mai University, Thailand.

2004 Bachelor of Science in Physical Therapy, Chiang Mai University, Thailand.

### POSITIONS AND APPOINTMENTS

2021-present Lecturer, Department of Physical Therapy, Faculty of Associated Medical Science, Chiang Mai University, Thailand.

2017-present Physical Therapist, Thaicycling Association, Thailand.

2005-2021 Physical Therapist and Clinical Instructor, Department of Physical Therapy, Faculty of Associated Medical Science, Chiang Mai University, Thailand.

2009-2017 Physical Therapist, Thai Amateur Weightlifting Association, Thailand.

2004-2005 Physical Therapist, Lanna Hospital, Chiang Mai, Thailand.

### AWARDS

- Outstanding researcher award (middle age range) by Faculty of Associated Medical Sciences, Chiang Mai University, Chiang Mai, Thailand, 2022 and 2023.

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- Highest impact factor researcher award by Faculty of Associated Medical Sciences, Chiang Mai University, Chiang Mai, Thailand, 2022 and 2023.
- MEDCHIC Health Hackathon 2022 award (bronze) “Partial weight support machine by Boon Chuay team” Suandok Medical Innovation District, Chiang Mai, Thailand, August 2022.
- Oral presentation award (bronze) entitled “Physiological factors associated with fall risk in individuals with Chronic Obstructive Pulmonary Disease (COPD)” at the Hong Kong Polytechnic university: The 11<sup>th</sup> Pan-Pacific Conference on Rehabilitation (PPCR), November 2018.

## RESEARCH INTEREST

- Cardiopulmonary and vascular rehabilitation
- Health innovations
- Sport rehabilitation
- Physical therapy in animals

## MEMBERSHIP

- Thai Physical Therapy Association
- Thailand Physical Therapy Council

## PUBLICATIONS (peer-reviewed)

### International publications

Nantakool S, Punturee K, Konghakote S, Sitthichoke C, Phirom K, **Chuatrakoon B**. Immediate Effects of Aerobic Exercise and Whole-Body Vibration on Fat Oxidation, Lipid Mobilization, and Cardiovascular Response in Individuals with Obesity. *J Clin Med*. 2024;13(1):44. doi: 10.3390/jcm13010044. (*Q1, IF 3.9*)

**Chuatrakoon B**, Konghakote S, Sa-Nguanmoo P, Nantakool S. Long-term impact of SARS-CoV-2 infection on cardiorespiratory fitness: a meta-analysis. *Front Public Health*. 2023 Oct 18;11:1215486. doi: 10.3389/fpubh.2023.1215486. (*Q1, IF 5.2*)

Sa-nguanmoo P, **Chuatrakoon B**, Pratanaphon S, Thanagosai J, Sriarpon J. Impact of physical activity on pulmonary function and respiratory muscle strength in obese young adults. *Trends Sci*. 2023. 20(11):6802. doi: 10.48048/tis.2023.6802. (*Q3, IF 0.74*)

**Chuatrakoon B**, Nantakool S, Orrapin S, Leung R, Howard DPJ, Rerkasem A, Derraik JGB, Rerkasem K. Influences of age and gender on operative risks following carotid endarterectomy: a systematic review and meta-analysis. *PLoS One*. 2023. 18(5). doi: 10.1371/journal.pone.0285540. (Q1, IF 3.752)

Kongsawasdi S, **Chuatrakoon B**, Angkawanish T, Thitaram C, Langkaphin W, Namwongprom K, Prupetkaew P, Wantanajittikul K. Variability of gait characteristics in lameness elephant. *J Vet Med Sci*. 2023. 85(2):226-231. doi: 10.1292/jvms.22-0357. (Q2, IF 1.776)

Dacha S, **Chuatrakoon B**, Parameyong A, Chalermboon C, Thumpunya N. Physical therapists' opinions on the effect of the COVID-19 pandemic on physical therapy management in government and private hospitals in Thailand: Preliminary results of a survey. *Eur Respir J*. 2022. 60: 2372. doi: 10.1183/13993003.congress-2022.2372. (Q1, IF 33.795)

Wantanajittikul K, Wiboonsuntharangkoon C, **Chuatrakoon B**, Kongsawasdi S. Application of machine learning to predict trajectory of the center of pressure (COP) path of postural sway using a triaxial inertial sensor. *Sci World J*. 2022. doi: 10.1155/2022/9483665. (Q2, IF 0.398)

Dacha S, **Chuatrakoon B**, Sornkaew K, Sutthakhun K, Weeranorapanich P. Effects of wearing different facial masks on respiratory symptoms, oxygen saturation, and functional capacity during six-minute walk test (6MWT) in healthy subjects. *Can J Respir Ther*. 2022. 58:85-90. (Q2, IF 0.392)

**Chuatrakoon B**, Nantakool S, Rerkasem A, Orrapin S, Howard DPJ, Rerkasem K. Routine or selective carotid artery shunting for carotid endarterectomy (and different methods of monitoring in selective shunting). *Cochrane Database Syst Rev*. 2022.6(6). doi: 10.1002/14651858.CD000190.pub4. (Q1, IF 11.874)

**Chuatrakoon B**, Uthaikhup S, Ngai S.P.C, 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. 58(3):478-86. (Q1, IF 5.313)

Nantakool S, **Chuatrakoon B**, Veen MV, Rerkasem A, Rerkasem K. Exercise training as an adjunctive therapy for chronic venous insufficiency patients: evidence from research to practice. *Int J Low Extrem Wounds*. 2021. doi: 10.1177/15347346211060126. (Q3, IF 2.057)

Dacha S, **Chuatrakoon B**, Sornkaew K, Sutthakhun K, Weeranorapanich P. Impact of wearing different facial masks on respiratory symptoms, oxygen saturation, and functional capacity

during six-minute walk test (6MWT) in healthy young adults. Eur Respir J. 2021. 58: OA1183. (Q1, IF 33.795)

Kongsawasdi S, Wantanajittikul K, Langkaphin W, **Chuatrakoon B**, Namwongprom K, Prupetkaew P, Angkawanish T. Optimal management to improve quality of life for an injured baby elephant: Thailand multidisciplinary care team. Kafkas Univ Vet Fak Derg. 2021. 27(5):655-9. (Q3, IF 0.633)

**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 Rehab. 2020. 101(9):1590-602. (Q1, IF 3.290)

**Chuatrakoon B**, Uthaikhup S, Pichaiya T, Sungkarat S. Relationship between cognition, disease severity and balance performance in individuals with Chronic Obstructive Pulmonary Disease. J Assoc Med Sci. 2019. 52(2):131-7. (Q-, IF-)

Kongsawasdi S, Mahasawangkul S, Pongsopawijit P, Boonprasert K, **Chuatrakoon B**, Thonglorm N, Kanta-in R, Tajarernduang T, Nganvongpanit K. Biomechanical parameters of Asian elephant (*Elephas maximus*) walking gait. Kafkas Univ Vet Fak Derg. 2017. 23(3):357-62. (Q3, IF 0.452)

Chittawatanarat K, Pruenglampoo S, Kongsawasdi S, **Chuatrakoon B**, Trakulhoon V, Ungpinitpong W, Patumanond J. The variations of body mass index and body fat in adult Thai people across the age spectrum measured by bioelectrical impedance analysis. Clin Interv Aging. 2011. 6:285-94. (Q2, IF 2.083)

Nganvongpanit K, Kongsawasdi S, **Chuatrakoon B**, Yano T. Heart rate change during aquatic exercise in small, medium and large healthy dogs. Thai J Vet Med. 2011. 41(4):455-61. (Q4, IF 0.194)

### **National publications**

**Chuatrakoon B**, Ratanapinunchai J, Mathiyakom W, Ariyachaikul S. The distance of superior kibler and inferior kibler in normal subjects aged between 15-20 years old. Thai J Phy Ther. 2012. (TCI 1)

### **RESEARCH GRANTS**

#### **Principal Investigator:**

2023-2024      Chiang Mai University Research Grant (Junior Researcher)  
Project “The agreement of the various distance walk way in the 6-minute walk test”

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- 2021-2022 Associated Medical Sciences Research Grant  
Project “Development of home-based pulmonary rehabilitation program for suspected people with Chronic Obstructive Pulmonary Disease (COPD) predicted by Artificial intelligence (AI) system”
- 2019-2020 Associated Medical Sciences Research Grant  
Project “The follow-up period of home-based balance training combined with pulmonary rehabilitation program in individuals with chronic obstructive pulmonary disease”
- 2019-2020 National Research Council of Thailand (NRCT)  
Project “Assessment and Management of Balance Impairment and Fall Risk in Individuals with Chronic Obstructive Pulmonary Disease (COPD)”
- 2013-2014 Associated Medical Sciences Research Grant  
Project “Spatiotemporal gait analysis in elephants”
- 2007-2008 Associated Medical Sciences Research Grant  
Project “Comparison of aquatic exercise and ground walking in dogs with joint problems”

**Co-investigator:**

- 2023-2024 Chiang Mai University Research Grant (PM 2.5)  
Project “PM2.5 Impacts on Health: Occurrence to Sustainable Outcomes for the Northern Thai Population (Project PHOON)”
- 2023-2024 Chiang Mai University Research Grant (Targeted Research)  
Project “Evaluation and development of physical therapy service using a mobile body weight support for gait training prototype.”
- 2022-2023 Chiang Mai University Research Grant (Junior Researcher)  
Project “Immediate effect of aerobic exercise and whole-body vibration on fat mobilization, fat oxidation, and cardiovascular changes in individuals with obesity”
- 2021-2022 Associated Medical Sciences Research Grant  
Project “Functional ability and quality of life of stroke patients who receive services at rehabilitation center, MaeKaa municipality, Sunpatong district, Chiang Mai province”
- 2020-2021 Associated Medical Sciences Research Grant

	Project “Development of machine learning for risk of obstructive pulmonary disease evaluation”
2020-2021	Associated Medical Sciences Research Grant Project “Reliability validity and responsiveness of dyspnea assessment instruments in patients with Chronic Obstructive Pulmonary Disease (COPD)”
2019-2020	Associated Medical Sciences Research Grant Project “Kinematic gait analysis in lameness elephants”

### **SHORT COURSE TRAINING/ CONFERENCE**

<i>Course</i>	<i>Organization</i>	<i>Date</i>
New skill: Entrepreneurship of Learners	Chiang Mai University, Thailand	May, 2022
Basic and advanced human research Ethics training course	Faculty of Medicine, Chiang Mai University, Thailand	January, 2022
Diploma of Clinical Epidemiology	Faculty of Medicine, Chiang Mai University, Thailand	September-December, 2021
Systematic Review and Evidence-Synthesis with Stata	Faculty of Medicine, Chiang Mai University, Thailand	August, 2021
Training in Sample Size	Program for HIV Prevention and Treatment (PHPT), Thailand	January, 2020
Basic Life Support for Instructor (BLS Instructor)	Faculty of Medicine, Chiang Mai University, Thailand	November, 2018
Spirometry Training	Thoracic Society of Thailand under Royal Patronage,	April, 2017

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	Thailand	
4 Skills for Academic Purposes	Chiang Mai University, Thailand	April, 2017
Sports Physical Therapy	The Sports Authority of Thailand, Thailand	August, 2015
The 4 <sup>th</sup> International Conference On Sport and Exercise Science; Well-Being Well Beyond Sport Ans Exercise	The Sports Authority of Thailand, Thailand	March, 2013
Management in Sports Physical Therapy	Saint Louis College & The Sports Authority of Thailand, Thailand	July, 2012
Sports PT management	Nakhonphing Hospital, Thailand	December, 2012
Evaluations and Monitoring in Cardiopulmonary Patients for Physical Therapy	Srinakharinwirot University, Thailand	April,2010
Physical Therapy in CABG: phase I-III	Rangsit University, Thailand	October-November, 2007

### **RESEARCH ETHICS, GCP and OTHER RELEVANT TRAINING**

- Human research ethics (online). Naresuan University, Thailand, June 21, 2023.
- Basic and advanced human research Ethics training course. Chiang Mai University, January 27-28, 2022.
- Human research ethics (online). National Research Council of Thailand, December 8, 2020.
- Human research ethics. Chiang Mai University, July 4-5, 2019.
- Human research ethics. Faculty of Nursing, Chiang Mai University, June 8-9, 2017.
- Good Clinical Practice for Biomedical Research (GCP training), Mahidol university, May 18, 2016.

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