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Department of Physical Therapy,
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Education:

Ph.D. (Exercise Science) Mahidol University, Thailand (2007 – 2011)

M.S. (Exercise Physiology) Mahidol University, Thailand (2004 – 2006)

B.S. (Physical Therapy) Mahidol University, Thailand (2000 – 2003)

Research of interest:

Cardiopulmonary rehabilitation, vascular rehabilitation, exercise in non-communicable diseases (NCD)

Ongoing Research Topics:

1. Different hand exercises on arteriovenous fistula maturation in chronic renal disease patients.
2. The combined effect of inspiratory muscle training and early mobilization program on weaning of mechanical ventilation in critically ill patients

International publications:

1. Nantakool S, **Prasannarong M**, Srisuwan T, Reanpang T, Apichartpiyakul P, Rerkasem K. Agreement between physical and ultrasound examination for arteriovenous fistula maturation diagnostics in Thai hemodialysis patients. J Vasc Access. 2020:1129729820983177. doi: 10.1177/1129729820983177. (Q3, IF=1.223)
2. Nantakool S, Rerkasem K, Reanpang T, Worraphan S, **Prasannarong M**. A systematic review with meta-analysis of the effects of arm exercise training programs on arteriovenous fistula maturation among people with chronic kidney disease. Hemodial Int. 2020;24(4):439-53. doi: 10.1111/hdi.12875. (Q2, IF=1.839)
3. Worraphan S, Thammata A, Chittawatanarat K, Saokaew S, Kengkla K, **Prasannarong M**. Effects of Inspiratory Muscle Training and Early Mobilization on Weaning of Mechanical Ventilation: A Systematic Review and Network Meta-analysis. Arch Phys Med Rehabil. 2020;101(11):2002-14. doi: 10.1016/j.apmr.2020.07.004. (Q1, IF=3.098)
4. **Prasannarong** M, Saengsirisuwan V, Surapongchai J, Buniam J, Chukijrungroat N, Rattanavichit Y. Rosmarinic acid improves hypertension and skeletal muscle glucose transport in angiotensin II-treated rats. BMC Complement Altern Med. 2019;19(1):165. doi: 10.1186/s12906-019-2579-4. (IF=2.479)
5. Reanpang T, **Prasannarong M**, Pongtam S, Murray ST, Rerkasem K. Upper limb exercise for people on haemodialysis following arteriovenous fistula surgery. Cochrane Database Syst Rev. 2019;5:CD013327. doi:10.1002/14651858. CD013327. (IF=7.755)
6. Yanola J, Nachaiwieng W, Duangmano S, **Prasannarong M**, Somboon P, Pornprasert S. Current prevalence of intestinal parasitic infections and their impact on hematological and nutritional status among Karen hill tribe children in Omkoi District, Chiang Mai Province, Thailand. Acta Trop. 2018;180:1-6. doi: 10.1016/j.actatropica.2018.01.001. (IF=2.218)
7. Surapongchai J, **Prasannarong M**, Bupha-Intr T, Saengsirisuwan V. Angiotensin II induces differential insulin action in rat skeletal muscle. J Endocrinol. 2017;232(3):547-60. doi: 10.1530/JOE-16-0579. (IF=4.706)
8. Pornprasert S, Wanachantararak P, Kantawong F, Chamnanprai S, Kongpan C, Pienthai N, Yanola J, Duangmano S, **Prasannarong M**. Excessive fluoride consumption increases haematological alteration in subjects with iron deficiency,

thalassaemia, and glucose-6-phosphate dehydrogenase (G-6-PD) deficiency. Environ Geochem Health. 2017:39(4):751-8. doi: 10.1007/s10653-016-9845-x. (IF=2.616)

9. Leelarungrayub J, Eungpinichpong W, Klaphajone J, **Prasannarong M**, Boontha K. Effects of manual percussion during postural drainage on lung volumes and metabolic status in healthy subjects. J Bodyw Mov Ther. 2016;20(2):356-63. doi: 10.1016/j.jbmt.2015.11.002.
10. **Prasannarong M**, Santos FR, Hooshmand P, Hooshmand P, Giovannini FJ, Henriksen EJ. The lipid peroxidation end-product and oxidant 4-hydroxynonenal induces insulin resistance in rat slow-twitch skeletal muscle. Arch Physiol Biochem. 2014;120(1):22-8. doi: 10.3109/13813455.2013.834937. (IF=2.11)
11. Demarco VG, Ford DA, Henriksen EJ, Aroor AR, Johnson MS, Habibi J, Ma L, Yang M, Albert CJ, Lally JW, Ford CA, **Prasannarong M**, Hayden MR, Whaley-Connell AT, Sowers JR. Obesity-Related Alterations in Cardiac Lipid Profile and Nondipping Blood Pressure Pattern during Transition to Diastolic Dysfunction in Male db/db Mice. Endocrinology. 2013;154(1):159-71. doi: 10.1210/en.2012-1835. (IF=4.286)
12. **Prasannarong M**, Santos FR, Henriksen EJ. ANG-(1-7) reduces ANG II-induced insulin resistance by enhancing Akt phosphorylation via a Mas receptor-dependent mechanism in rat skeletal muscle. Biochem Biophys Res Commun. 2012 Sep 28;426(3):369-73. doi: 10.1016/j.bbrc.2012.08.093. (IF=2.406)
13. Henriksen EJ, **Prasannarong M**. The Role of the Renin-Angiotensin System in the Development of Insulin Resistance in Skeletal Muscle. Mol Cell Endocrinol. 2012;426(3):369-73. doi: 10.1016/j.mce.2012.04.011. (IF=4.08)
14. **Prasannarong M**, Vichaiwong K, Saengsirisuwan V. Calorie restriction prevents the development of insulin resistance and impaired insulin signaling in skeletal muscle of ovariectomized rats. Biochim Biophys Acta. 2012;1822(6):1051-61. doi: 10.1016/j.bbadis.2012.02.018. (IF=5.476)
15. **Prasannarong M**, Saengsirisuwan V, Piyachaturawat P, Suksamrarn A. Improvements of insulin resistance in ovariectomized rats by a novel phytoestrogen from *Curcuma comosa* Roxb. BMC Complement Altern Med. 2012;12(1):28. doi: 10.1186/1472-6882-12-28. (IF=2.082)
16. Santos FR, Diamond-Stanic MK, **Prasannarong M**, Henriksen EJ. Contribution of the serine kinase c-Jun N-terminal kinase (JNK) to oxidant-induced insulin

resistance in isolated rat skeletal muscle. Arch Physiol Biochem. 2012;118(5):231-6. doi: 10.3109/13813455.2012. (IF=2.11)

17. Marchionne EM, Diamond-Stanic MK, **Prasonnarong M**, Henriksen EJ. Chronic renin inhibition with aliskiren improves glucose tolerance, insulin sensitivity, and skeletal muscle glucose transport activity in obese Zucker rats. Am J Physiol Regul Integr Comp Physiol. 2012;302(1):R137-42. doi: 10.1152/ajpregu.00448.2011. (IF=3.284)
18. Intapad S, Saengsirisuwan V, **Prasannarong M**, Chuncharunee A, Suvitayawat W, Chokchaisiri R, et al. Long-term effect of phytoestrogens from *Curcuma comosa* Roxb. on vascular relaxation in ovariectomized rats. J Agric Food Chem 2012;60(3):758-64. doi: 10.1021/jf203173b. (IF=3.46)
19. Vichaiwong K, Henriksen EJ, Toskulkao C, **Prasannarong M**, Bupha-Intr T, Saengsirisuwan V. Attenuation of oxidant-induced muscle insulin resistance and p38 MAPK by exercise training. Free Radic Biol Med 2009;47(5):593-9. doi: 10.1016/j.freeradbiomed.2009.05.036. (IF=5.606)
20. Saengsirisuwan V, Pongseeda S, **Prasannarong M**, Vichaiwong K, Toskulkao C. Modulation of insulin resistance in ovariectomized rats by endurance exercise training and estrogen replacement. Metabolism Clinical and Experimental 2009;58:38-47. doi: 10.1016/j.metabol.2008.08.004. (IF=2.89)

National publications:

1. Thammata A, Worraphan S, Chittawatanarat K, Juntaping K, **Prasannarong M**. Impact of inspiratory muscle training and early mobilization program during the peri-weaning period on body composition in critically ill surgical patients: A pilot randomized controlled trial. J Assoc Med Sci 2021;54(1):57-65. (TCI1, IF=0.237)

Abstracts and presentations:

1. **Prasannarong M**, Leelarungrayub J, Sittilertpisan P. The effects of early mobilization and inspiratory muscle training on body composition and muscle strength in mechanical ventilated critically ill patients. AMS-CMU Conference, 2019, Chiang Mai, Thailand
2. **Prasannarong M**, King-ngam J, Thongduang K, Kerdthong D. Heart rate variability and cardiometabolic parameters in hypertensive untrained and exercise-

trained old-age women: a case report. AMS-CMU Annual Conference, 2014, Chiang Mai, Thailand.

3. **Prasannarong M**, Piyachaturawat P, Saengsirisuwan V. Calorie restriction prevents the development of insulin resistance and impaired insulin signaling in skeletal muscle of ovariectomized rats. The 41st Physiological Society of Thailand Annual Meeting, 2012, Bangkok, Thailand.
4. **Prasannarong M**, Santos FR, Henriksen EJ. ANG (1-7) attenuates ANG II-induced insulin resistance in rat skeletal muscle *in vitro*. The Arizona Physiological Society, 2011, Arizona, USA.
5. **Prasannarong M**, Santos FR, Henriksen EJ. ANG (1-7) attenuates ANG II-induced insulin resistance by inducing Akt phosphorylation via a Mas receptor-dependent mechanism in rat skeletal muscle *in vitro*. The Frontiers in Biomedical Research Poster Forum, 2011, Arizona, USA.
6. **Prasannarong M**, Vichaiwong K, Saengsirisuwan V. Weight control diminishes progression of insulin resistance due to estrogen-deprived condition. The 71st Scientific Sessions, American Diabetes Association, 2011, California, USA.
7. **Prasannarong M**, Piyachaturawat P, Saengsirisuwan V. *Curcuma comosa* Roxb. improves insulin-stimulated glucose transport and decreases body weight in ovariectomized rats. 36th Physiological Society of Thailand Annual Meeting, 2007, Ayutthaya, Thailand