

Miao-Ju Hsu, PT, PhD

Educational Background

- Ph.D University of Iowa, Iowa, USA
MS University of Iowa, Iowa, USA
BS National Taiwan University, Taipei, Taiwan

Expertise

- Cardiopulmonary physical therapy
- Exercise physiology
- Health promotion
- Physical agents

Course Coordinator

- Ethics in Physical Therapy
- Introduction to Paper Reading and Critique
- Clinical Practicum

Current Research Projects

PI. Early intervention with a low-intensity leg cycling exercise program for individuals after stroke (MOST 103-2314-B-037 -003 -MY3)

Clinical Experiences

- Part-time physical therapist: Department of Rehabilitation, KMU, Koahsiung, Taiwan
- Full-time physical therapist: Mackay Memorial Hospital, Taipei Branch, Taipei, Taiwan

Journal Papers (in 5 years)

Chen CC, Chuang YF, Yang HC, **Hsu M**, Huang YZ, Chang Y*. Neuromuscular electrical stimulation of the median nerve facilitates low motor cortex excitability in patients with spinocerebellar ataxia. *J Electromyogr Kinesiol* 25: 143-150, 2015. (SCI)

Fang CY, **Hsu M** (contribute equally to first author), Chen CC, Cheng HY, Chou CC, Chang Y*. Robot-assisted passive exercise for ankle hypertonia in individuals with chronic spinal cord injury. *J. Med. Biol. Eng* 35:464-472, 2015. (SCI)

Tai I, Lai CL, **Hsu MJ**, Lin RT, Huang M-H, Lin CL, Hsieh CL, Lin JH. Effect of thermal stimulation on corticomotor excitability in patients with stroke. *Am J Phys Med Rehabil* 93(9):801-8. doi: 10.1097/PHM.000000000000105. (SCI)

Hung RM, Lin JH, Chen CC, Lin CL, Chen PH, **Hsu MJ***. Effects of Leg Cycling Motion Training on Walking Ability and Motor Cortex Activation in Healthy Older and Young Adults. *FJPT* 39(1):32-41, 2014.

Yang HY, Lee CL, Lin R, **Hsu MJ**, Chen CC, Lin JH*, Lo SK. Effect of Biofeedback Cycling Training on Functional Recovery and Walking Ability of Lower Extremity in Patients with Stroke. *The Koahsiung Journal of Medical Sciences* 2013 doi: <http://dx.doi.org/10.1016/j.kjms.2013.07.006> (SCI)

Hsu HW, Lee CL, **Hsu MJ**, Wu HC, Lin R, Hsieh CL, Lin JH*. Effects of Noxious Versus Innocuous Thermal Stimulation on Lower Extremity Motor Recovery 3 Months After Stroke. *Arch Phys Med Rehabil* 94(4):633-641, 2013. (SCI)

Chang Y*, Liang JN, **Hsu MJ**, Lien HY, Fang CY, Lin CH. Effects of continuous passive motion on reversing the adapted spinal circuit in humans with chronic spinal Cord Injury. *Arch Phys Med Rehabil* 94(5): 822-828, 2013. (SCI) .

Chang YJ, Chou CC, Chan HL, **Hsu MJ**, MY Yeh, Fang CY, Chuang YF, Wei SH, Lien HY. Increases of Quadriceps Inter-Muscular Cross-Correlation and Coherence during Exhausting Stepping Exercise. *Sensors* 12: 16353-16367, 2012. (SCI)

Hsu MJ*、Liaw LJ、Chang YJ、Metabolic syndrome and stroke、*FJPT* 37 (2) :



136-145, 2012. ◦

Liaw LJ, Hsieh CL, **Hsu MJ**, Chen HM, Lin JH, Lo SK. Test-retest reproducibility of two short-form balance measures used in individuals with stroke. *International Journal of Rehabilitation Research* 35(3): 256–262, 2012. (SCI)

Chang YJ*, **Hsu MJ**, Chen SM, Lin CH, Wong AM. Decreased central fatigue in multiple sclerosis patients after 8 weeks of surface functional electrical stimulation. *Journal of Rehabilitation Research and Development* 48(5): 555-564, 2011. (SCI)

Liaw LJ, **Hsu MJ**, Liao CF, Liu MF, Hsu AT*. The Relationships between Inter-recti Distance Measured by Ultrasound Imaging and Abdominal Muscle Function in Postpartum Women: a 6-month Follow-up Study. *Journal of Orthopaedic & Sports Physical Therapy* 41(6):435-443, 2011. (SCI)

Chang, YJ, Hsieh TH, Huang YM, **Hsu MJ**, Wong AM. A lack of modulation of motor evoked potential in sensory-impaired individuals with spinal cord injuries. *Journal of Medical and Biological Engineering. Journal of Medical and Biological Engineering* 31(1): 37-43, 2011. (SCI)

Hsu MJ, Wei SH, Chang YJ. Effect of Neuromuscular Electrical Muscle Stimulation on Energy Expenditure in Healthy Adults. *Sensors* 11: 1932-1942, 2011. (SCI)