




## Curriculum Vitae

Personal Information		
Title	Professor and Attending Physician	
Name	Yu-Cheng Pei	
Degree	MD, PhD	
Country	Taiwan	
Affiliation	Director, Taiwan Academy of Physical Medicine and Rehabilitation Director, Taiwan Society of neurorehabilitation Vice Chairman, Medical Design Association	



## Biography

Dr. Pei's research focuses on understanding how tactile features, such as tactile orientation or motion, are represented in the primary somatosensory cortex. Using rodent and primate models, his team characterizes the neural codes underlying the non-linear processing of tactile features as the information ascends along the processing hierarchies. This understanding is further applied in the development of rehabilitation robots which have been approved by FDA and applied clinically for patients with neurological disorders.

## Education and Professional Experiences

- 1999- Psychiatrist in Department of Physical Medicine and Rehabilitation, Chang Gung Memorial Hospital at Linkou, Taoyuan, Taiwan
- 2005-2009 PhD Program of Neuroscience, School of Medicine, Johns Hopkins University, Baltimore, USA
- 2018- Director, Department of Physical Medicine and Rehabilitation, Chang Gung Memorial Hospital at Linkou, Taoyuan, Taiwan



## Selected Publications

- Huang JJ, ..., Pei YC\*. Therapeutic effects of powered exoskeletal robot-assisted gait training in inpatients in the early stage after stroke: a pilot case-controlled study. Journal of NeuroEngineering and Rehabilitation 21, (1), 1-13, 2024.
- Pu SW, et al. Decoupling Finger Joint Motion in an Exoskeletal Hand: A Design for Robot-assisted Rehabilitation. IEEE transactions on industrial electronics. 2020 Jan. 67(1) 686-697.
- Pei Y, et al. Neural mechanisms of tactile motion integration in primary somatosensory cortex. Neuron. 2011; 69(3):536-547.
- Pei Y, et al. Shape invariant coding of motion direction in primary somatosensory cortex. PLoS Biology. 2010;8(2):e1000305.
- Pei Y, et al. The tactile integration of local motion cues is analogous to its visual counterpart. Proc Natl Acad Sci USA. 2008 Jun 10;105(23):8130-5.