

**Sheng-Tzung Tsai, M.D., Ph.D.**

Director, Dept. of Neurosurgery, Hualien Tzu Chi Hospital,  
Buddhist Tzu Chi Medical Foundation

Professor, Dept. of Medicine, Tzu Chi Univ., Taiwan



I am a neurosurgeon who treats patients with neurodegenerative diseases such as Parkinson's disease, hydrocephalus and also brain tumors and cranial nerve compression syndromes such as trigeminal neuralgia. I am also Director of the Department of Neurological Surgery at Hualien Tzu Chi Hospital, Taiwan since 2020.

I have extensive experiences on using neuro-modulation techniques and devices, including deep brain stimulation, vagus nerve stimulation and spinal cord stimulation to ameliorate movement disorders symptoms, neuropathic pain and epilepsy. In recent years, I am interested in how anesthesia modulates neuronal firings and oscillation. At the same time, our team apply these neuro-stimulation strategies to solve and relieve disabling neurological paralysis or motor weakness from spinal cord injury and stroke.