

The Chinese University of Hong Kong



Department of Biomedical Engineering

Time: 10:00am, 13 September 2023 (Wednesday) Venue: ERB1118, William M.W. Mong Engineering Building

Application of electrical impedance myography(EIM) in neurorehabilitation: current and future



Professor LI Le Institute of Medical Research Northwestern Polytechnical University

Abstract

Stroke is a leading cause of death and disability in aging society. Muscle dysfunction, common sequela of stroke, has long been of research interests. Therefore, how to accurately assess muscle health condition is particularly important. Electrical impedance myography (EIM) has proven to be feasible to assess muscle impairment in patients with stroke in terms of micro structures, such as muscle membrane integrity, extracellular and intracellular fluids, etc. Here in this talk, the potential utility EIM for evaluating muscle function in neurorehabilitation will be introduced, and the insights and challenges of EIM application will also be discussed.

Biography

Dr. Le Li currently is a professor with the Institute of Medical Research, Northwestern Polytechnical University, Xi'an, China. He received his Ph.D degree in the Hong Kong Polytechnic University (2007) and completed his postdoctoral training in the same university (2010). He worked as a clinical researcher at First Affiliated Hospital, Sun Yat-sen University from 2010-2021. Previously, Dr. Li also acted as a visiting scientist and postdoc at TIRR Memorial Hermann Research Center and Department of Physical Medicine and Rehabilitation, University of Texas Health Science Center(UTHealth) at Houston, USA(2014-2016). Dr. Li's research interests mainly focus on rehabilitation engineering and biomechanics, particularly in neuromusculoskeletal modeling of normal and spastic subjects, bio-signal processing and evaluation (ie. EMG, EIM), neuromodulation technique, and musculoskeletal ultrasound application.

*** ALL ARE WELCOME ***