# CCMS Center for Clinical Movement Science



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Invited by:



## COLLOQUIUM

# Hand Biomechanics and Rehabilitation

## Monday October 16, 2023, 4:00-5:00 pm Lind Hall 325

#### Abstract

The hand receives sensory stimuli and executes motor commands that are integrated in the various functional manipulations for daily tasks. Awkward and inefficient finger movements, poor force coordination and strength, sensation deficit of motor control of the affected hands are most common phenomena in patients. Therefore, our research team developed a series of hand function control training systems to explore characteristics of force patterns when conducting functional tasks and to enable training and assessment of finger force control in functional postures. Also, the customdesigned computerized evaluation and re-education biofeedback prototype was developed to analyze hand grasp performances and monitor the training effects on hand coordination for stroke patients with sensory disturbance and without motor deficiency.

#### Biosketch

Dr. Fong-Chin Su is Chair Professor of Biomedical Engineering, the Past Executive Vice President (2019-2023), and Acting Dean of Engineering (2020/08-2021/06), National Cheng Kung University, Immediate Past President of World Association for Chinese Biomedical Engineers, and Councilor of World Council of Biomechanics (2014-26). His research focuses on musculoskeletal biomechanics and medical innovation.

