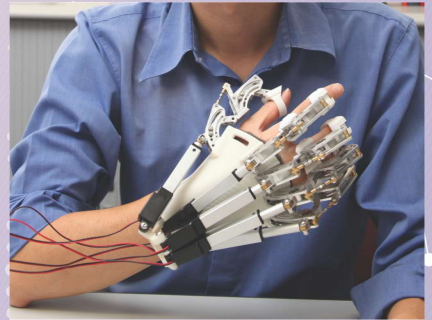




CUHK Jockey Club *HOPE 4 Care* Programme

Hand of Hope - Exoskeleton Robotic Hand for Stroke Rehabilitation

The interactive intention-driven hand training robotic system is used for neuromuscular rehabilitation of the hand and forearm. This can help stroke survivors to regain their hand functions through motor relearning. The hand training system functions as a biofeedback device which surface electromyography (EMG) sensors are used to capture the user's own muscle signals to activate the system for moving his/her paretic hand. These EMG signals are processed and can be visualized with visual feedback to make sure the user actively engaging throughout a therapy session.



Exoskeleton Robotic Hand

Clinical Evidence

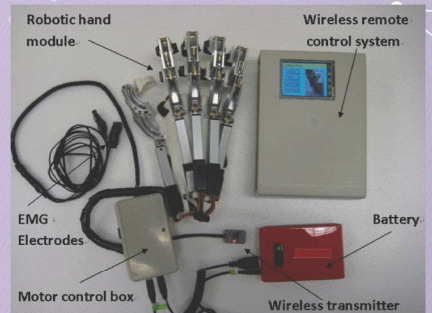
Clinical trials have been conducted to show clinical effectiveness in improving the hand and upper-limb functions of chronic stroke survivors with stroke onset more than 6 months.

Applications

Upper-limb and hand motor rehabilitation

Target Users

Individuals with stroke or upper-limb/hand motor impairments



Components of robotic hand training system

The Hong Kong Jockey Club Charities Trust has supported CUHK to launch a three-year project "CUHK Jockey Club HOPE 4 Care Programme" to implement four evidence-based advanced rehabilitation technologies in 40 local elderly day care centres and rehabilitation centres, to benefit the community.

