

Materials List for:

## Development of a Novel Task-oriented Rehabilitation Program using a Bimanual Exoskeleton Robotic Hand

Yi-Mei Chen<sup>1</sup>, Szu-Shen Lai<sup>1</sup>, Yu-Cheng Pei<sup>2,3,4,5</sup>, Chia-Ju Hsieh<sup>1</sup>, Wei-Han Chang<sup>1</sup>

Correspondence to: Chia-Ju Hsieh at cjcheryl@cgmh.org.tw, Wei-Han Chang at weihan7252@gmail.com

URL: https://www.jove.com/video/61057

DOI: doi:10.3791/61057

## **Materials**

Name	Company	Catalog Number	Comments
Control Box	Rehabotics Medical Technology Corporation	HB01	The control box includes a power supply, sensor glove signal receiver, motor signal transmitter, and exoskeletal hand motion mode selection unit.
Exoskeletal Hand	Rehabotics Medical Technology Corporation	HS01	It is a wearable device causing the patient's fingers to move and is driven by an external motor and mechanical assembly.
Sensor Glove	Rehabotics Medical Technology Corporation	HM01	Worn on the patient's unaffected side hand. The sensors in the sensor glove will detect flexing and extension of the hand, and this data will be used to control the exoskeletal hand when in bimanual mode.

<sup>&</sup>lt;sup>1</sup>Department of Physical Medicine and Rehabilitation, Chang Gung Memorial Hospital at Taoyuan

<sup>&</sup>lt;sup>2</sup>Department of Physical Medicine and Rehabilitation, Chang Gung Memorial Hospital at Linkou

<sup>&</sup>lt;sup>3</sup>School of Medicine, Chang Gung University

<sup>&</sup>lt;sup>4</sup>Center for Vascularized Composite Allotransplantation, Chang Gung Memorial Hospital

<sup>&</sup>lt;sup>5</sup>Healthy Aging Research Center, Chang Gung University