

2009ICORR WS-1 “Rehabilitation Robotics: Upper Extremity”

(10:00-13:00)

10:00-10:30 Junji Furusho (Osaka University)

Identify existing rehabilitation robots for upper extremities, their design choices and limitations The goal is here is to present a general overview of the different robots, their design philosophies, and their limitations (including passive-type but not focusing too much)

10:30-11:00 Hermano Igo Krebs (MIT)

Key general clinical results on the use of therapeutic robotics for stroke rehabilitation

11:00-11:20 Hermano Igo Krebs (MIT):

The potential of rehabilitation robotics as an evaluation tool

11:20-11:40 Hermano Igo Krebs (MIT):

Models for neuro-recovery

11:40-11:55 Junji Furusho (Osaka University)

Example of Application: passive-type rehabilitation robotics

11:55-12:00 Akio Inoue (ERtec Co Ltd.):

Demonstration of ER brake/clutch

12:00-12:10 Seiichi Takarabe (Information Technology Development JAPAN INC.):

Control system of rehabilitation robots for upper extremities

12:10-12:20 Kunihiko Oda (Osaka Electro-communication University):

Presentation of a therapeutic skill by robotics

12:20-12:30 Takuya Ozawa (Kano General Hospital) and Junji Furusho (Osaka University):

Clinical tests for assessment of synergy movements of stroke patients using PLEMO

12:30-13:00 Hermano Igo Krebs(MIT), Junji Furusho (Osaka University) and Seiichi Takarabe (Information Technology Development JAPAN INC.):

Questions and Answers