## Objective

Humans can perform daily activities without any difficulties despite the physical state changes that accompany their growth. They can master various motor performances such as writing, walking and speaking. Our laboratory conducts studies on human motor adaptability by using psychophysiological methods and/or non-invasive measurements, such as magnetic resonance imaging (MRI), transcranial magnetic stimulation (TMS), and transcranial electrical stimulation (tES). The application and development of research outcomes will contribute to the fields of education, medical services, and information technology, which include physical movements.

## Required skills and knowledge

- ・Background in neuroscience and/or motor control research
- ・Skills in Matlab/Python programming and statistical methodology
- ・Ability to communicate and write in English

## Equipment

- ・MRI (Siemens, MAGNETOM Prisma, 3T)
- ・TMS (Magstim, Magstim 200)
- ・tES (neuroConn, DC-Stimulator Plus)
- ・EEG (Brain Products, BrainAmp)
- ・EMG (Oisaka Electonic Device, P-EMG plus)
- ・Soundproof shield room (Kawai Acoustic System)
- ・Haptic device (3D systems, Phantom Premium 1.5 High Force)
- ・VR (Oculus Rift; HTC Vive Pro)
- ・Motion capture (Optitrack, V120 Trio)
- ・Data Acquisition (Biopac, MP160; ADInstruments, PowerLab)