Research Theme：ODA Lab
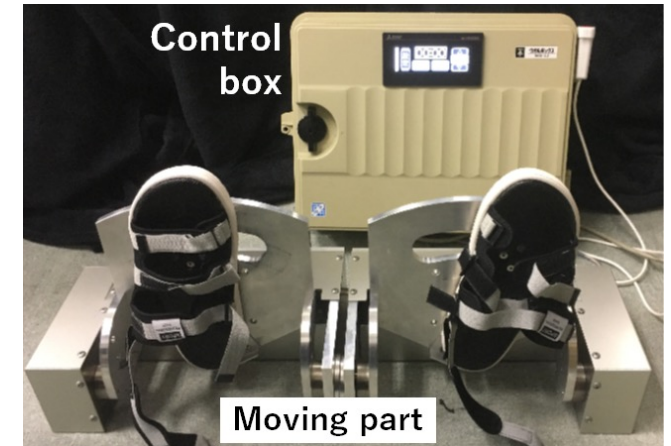
We are conducting research to clarify human characteristics from the biomechanics, and developing devices for medical and welfare applications. Examples of our research themes are as follows.

- Development of a DVT prevention device

    We are aiming to develop a device to prevent deep vein thrombosis by continuous passive movement of ankle joints.

- Development of custom-made pressure ulcer prevention mat

    We aim to develop a pressure ulcer prevention mat that can both maintain a sitting position and disperse body pressure.

- Evaluation of the mechanism of femur fracture

    We are investigating what kind of force acts on the femur during a fall to prevent fracture. For this purpose, we are conducting the finite element method to determine the factors that cause fractures.

- Examples of past research themes

    - Development of a bowel cleansing device

    - Shape optimization of NPPV nasal mask

    - Development of 3-D tactile sensor

    - Development of clarification technology for ultrasound imaging devices

    - Development of technology for optimizing the shape of prosthetic leg sockets

DVT prevention equipment

Material for pressure ulcer prevention mats