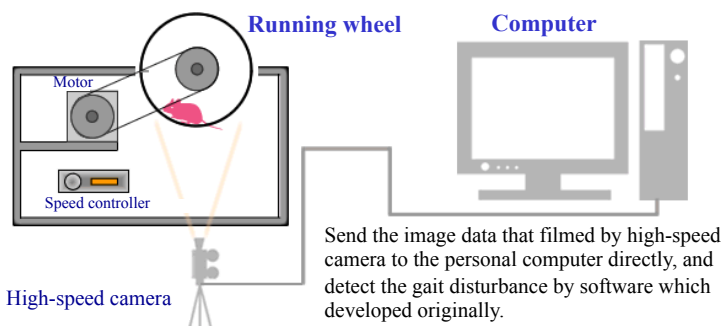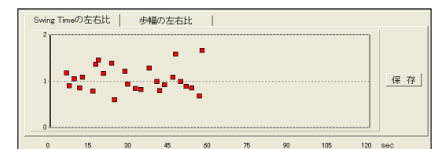# GAIT

A gait analyzing system for laboratory animals

When experimental animals suffered from arthritis or intermittent claudication are put into the revolving wheel, they keep walking constantly with gait disturbance. GAIT is the system which can detect and quantify gait disturbance by analyzing motion pictures (120 static images per second) of the foot bottom of hindlimbs stored in a computer as an AVI file with the original software.

System construction

Pat. Pub. No. （JP2003-250780）

Running wheel

Computer

Motor

Speed controller

High-speed camera

Send the image data that filmed by high-speed camera to the personal computer directly, and detect the gait disturbance by software which developed originally.
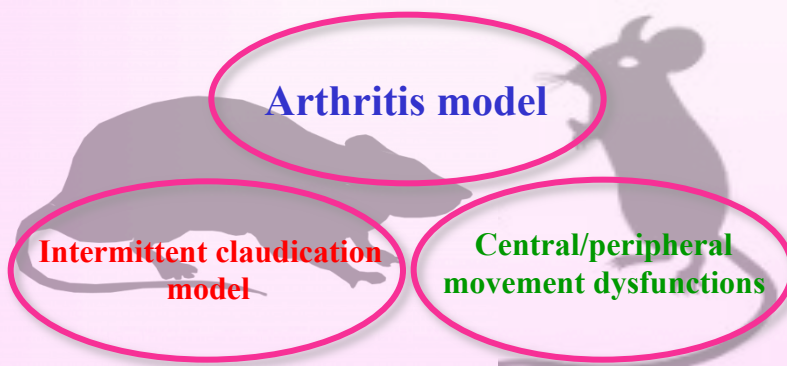
Tracking of hindlimb movement

Detection of gait disturbance

Feature

○ **GAIT realizes automatic detection of gait disturbance in rats and mice, and is capable of quantifying it easily and precisely.**

→**GAIT has no error in estimation between observers, which researchers have desired to investigate behavior.**

○ **GAIT can save analyzed image data as a file, so you can verify and reproduce the data easily.**

Examples of application

Arthritis model

Intermittent claudication model

Central/peripheral movement dysfunctions

GAIT

Discovery of new medicines

Exploration of pathogenesis