

### Description of Additional Supplementary Files

**Supplementary Movie 1** Description: Open field test before and after system mounted.

**Supplementary Movie 2** Description: Locomotion activity by LED on and off in normal mouse.

**Supplementary Movie 3** Description: Motion control by multisite stimulation.

**Supplementary Movie 4** Description: Behavioral control by selective activation and inhibition.

**Supplementary Movie 5** Description: Extorting behavior control during food competition.

**Supplementary Movie 6** Description: Open field test before and after MPTP injection in intact mice.

**Supplementary Movie 7** Description: Open field test before and after MPTP injection in LED attached mice.

**Supplementary Movie 8** Description: Open field test before and after saline injection in intact mice.

**Supplementary Movie 9** Description: Locomotion activity change by optical stimulation in MPTP-induced Parkinson's mouse model.

**Supplementary Movie 10** Description: Locomotion activity comparison between intact and MPTP-induced mice

**Supplementary Movie 11** Description: Locomotion activity change by optical stimulation in only MPTP-induced mice Also, we have labelled each movie as Supplementary Movie 1 etc.