

### BACKGROUND

**Activity and movement is a fundamental diagnostic parameter of animal behavior. However, measuring long-term individual movement within groups was not possible until now. Our Activity Monitor provides accurate individual movement data with full automation. It is a unique solution for the long-term tracking of individual animals living in groups.**

**The sensor plate placed underneath a cage detects individuals and tracks them as they move through the cage. Automated and long-term assessment of individual activity is made possible without having to place individuals in separate cages. The Activity Monitor utilizes RFID-technology.**

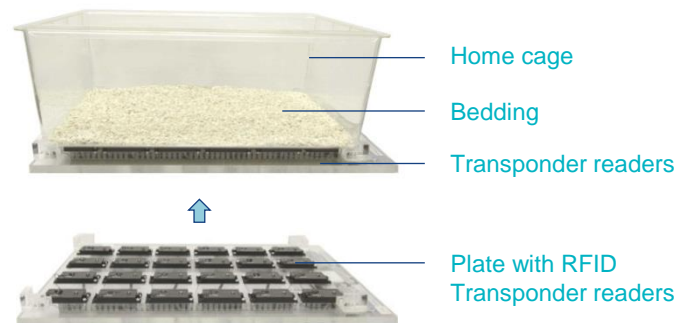
### RFID TECHNOLOGY

Radio-frequency identification (RFID) is a technology to identify and to track an individual within a group of animals. Individual tags are placed under the skin and are detected by sensors when in proximity. Subcutaneous tags are approximately the size of a corn of rice and require no battery.

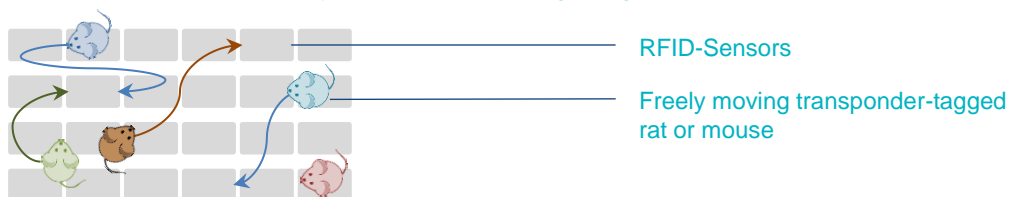
### CALCULATION OF

- Distances travelled
- Spatial preferences
- Move time
- Rest time
- Movement velocity

### SETUP WITH 24 TRANSPONDER SENSORS



Schematic presentation of movement by tracked animals living in a group



### APPLICATIONS

- Measurement of individual locomotor activity and distances
- Ideal for rat and mouse models of hyperactivity, movement disorders (i.e. ADHD, Parkinson), neuropathic pain, and arthritis
- Determination of individual spatial preferences within a group cage

### KEY FUNCTIONS

- Based on RFID-technology (transponder)
- Fully automated, 24/7 for every tagged animal
- Efficient space use since individuals stay in group cage

### OPTIONS

- Available for different cage types