

**Forced Exercise / Walking
Wheel Bed System
IACUC Standard Procedure
Effective Date: January 2025**

Description of Procedure:

The forced exercise test with the Walking Wheel Bed System (eg. Lafayette Life Sciences) system is a test that can be used for physiologic and behavioral (i.e., sleep deprivation, exercise paradigms) studies. The exercise/walking wheel bed supports 1-20 exercise/walking wheels. Each animal has its own running wheel with a swing-hatch system for easy animal loading and removal. The hand-held LCD interface permits a single exercise speed, exercise time, rest time, and number of cycles.

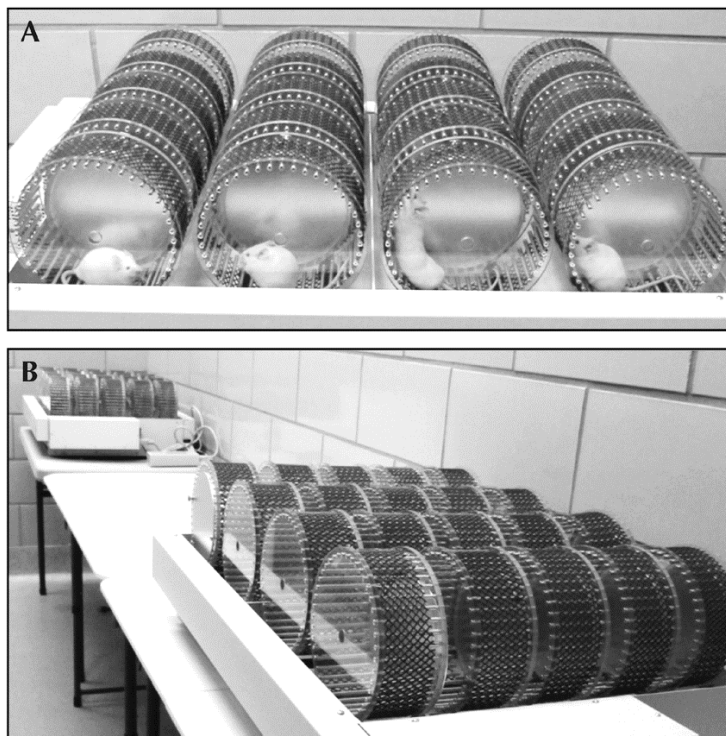
The exercise program described in this Standard Procedure consists of training mice to run on a motorized wheel system for up to 7 meters/min., which is well below the exercise tolerance level in mice (Lafayette Instrument Co.).

NOTE: This standard procedure is **not** for these models and procedures, which must be described in detail and justified in the IACUC protocol and may be Category E:

- Sleep deprivation or exercise exhaustion models.
- Exercising animals at speeds greater than 7.0 m/min and durations longer than one hour.

Supplies:

Lafayette Instrument Forced Exercise/Walking Wheel Bed system with LCD interface:



Procedure Steps:

Exercise program to train mice to run on a motorized wheel system for up to 7 meters/min:

1. The initial two-week training period involves acclimating the animal to the walking wheel and exercise bed and training the animal to run at a certain speed for a certain amount of time by increasing speed and duration incrementally.
2. Initial exercise speed will be 2.5 m/min for up to one hour.
3. The speed is then incrementally increased up to 7.0 m/min for up to one hour.
4. A trial should be stopped if the animal holds onto the wheel for 1 entire rotation.

Protocol requirements:

Section G.

- State how often a single animal will undergo this test.
- Describe the criteria that will exclude an animal from participating in this test.

RIO Documents Section:

Email a completed "[LARC Behavioral Equipment Sanitation SOP](#)" form to LARC (ORRodentNurses@ucsf.edu) for review and to request ATP testing. Once sanitation procedure is approved, upload the completed form to Documents section of RIO protocol and post the form in the procedure room.