



Standard Operating Procedure for *The Open Field Test for Mice*

1.0 PURPOSE

This procedure describes how to acclimate and test mice in the open field test. This is a commonly used paradigm to test locomotion, anxiety-like behavior, exploratory behavior, and activity levels.

2.0 SCOPE (Should include which Cores this SOP applies to)

This procedure applies to all personnel who will test mice in the novel object recognition test within the Stem Cells Engraftment and *in vivo* Analysis Core.

3.0 PROCEDURE

3.1 Apparatus

The testing arena (40cm x 40cm x 50cm tall) is fabricated from clear Plexiglas on the sides and opaque white Plexiglas on the bottom.

3.2 General Procedures

All testing occurs during the dark-phase (the active phase) of the light cycle. Testing is conducted under dim white-light illumination (about 150 lux). The subjects are moved from their housing room to the testing room and allowed to acclimate for at least 10min before testing. After testing is completed, the mice are immediately returned to the housing room. The test is recorded using digital video cameras.

3.3 Testing Procedure

1. Clean the testing arena with soap and water. Allow the arena to dry before use.
2. Begin recording. Hold the test card (with the date, test name, and testing conditions) in view. Hold the subject's cage card in view.
3. Place the subject into the center of the arena.
4. After 30 minutes, return the subject to its homecage.