Animal Preparation (Vevo 2100)

Standard Operating Procedure

1. Turn on physiological monitoring unit (temperature and heart rate). Set temperature of mouse platform.
2. Add isoflurane to reservoir on vaporizer if necessary, closing bottle and reservoir as quickly as possible.
3. Turn on oxygen (gas cylinder).
4. Flow rate is pre-adjusted. No need to adjust.
5. Adjust the stopcock (red tape) on the y-piece tubing so that the isoflurane/oxygen mixture will flow into the induction chamber. Make sure stopcock on tubing going to nose cone (pink tape) on mouse platform is closed.
6. Turn vaporizer dial for isoflurane delivery to 3-5%.
7. Place the animal in the clean induction chamber, making sure to close the chamber securely.
   
   Note: The induction chamber is functionally airtight; do not leave animals in the closed chamber without gas flow.

8. When sedated, turn on isoflurane flow in tubing going to nose cone on mouse platform. Turn off isoflurane flow to induction chamber.
9. Transfer mouse/rat onto imaging platform and attach nose cone.
10. Put electrode cream on electrodes on platform (to ensure good conductivity), then tape down paws of animal onto electrodes.
11. Apply a layer of hair removal cream (Nair) with a gauze tipped applicator on area to be imaged. Ensure that the cream gets into skin of mouse.
12. After 1-2 minutes, wipe Nair off with moist gauze. The prepared area should be clean, bare skin without any stray pieces of hair.
13. Dial isoflurane concentration to 1.5-2.0%. Monitor heart rate of animal.
14. Apply bland opthalmic ointment to animal’s eyes, especially if imaging the same animal for more than 30 minutes.
15. Apply ultrasound gel on area to be imaged and begin scanning either freehand or using the probe stand.