



MMMPP
Melbourne Mouse Metabolic
Phenotyping Platform



THE UNIVERSITY OF
MELBOURNE

Anaesthesia isoflurane delivery system (SomnoSuite)

1. Experiment

Use of the SomnoSuite anaesthesia delivery system

2. Aim

To anaesthetise a mouse using isoflurane inhalation

3. Equipment



The SomnoSuite Low-Flow Anesthesia System (Kent Scientific) uses room air to deliver isoflurane to mice at low flow rates to achieve and maintain anaesthetisation. Isoflurane is provided by the platform for use with this machine.

A blue 'RightTemp' heat pad is available for use with the SomnoSuite. There are four options:

- 'Off': temperature monitoring but no warming
- 'Unregulated': temperature monitoring, warming, no sensor control
- 'Pad temp regulated': temperature monitoring with pad sensor control
- 'Body temp regulated': temperature monitoring with animal sensor control (rectal probe).

Set target temperature.

4. Training requirements

Users must have:

1. Completed the Medical Building Biohazard Laboratory Practise online module
2. Read and understood MMMPP_SOP_001_Isoflurane_storage_and_safety and MMMPP_SOP_002_SomnoSuite_Isoflurane_anaesthetisation_of_mice
3. Read Chemwatch Isoflurane Safety Data Sheet

4. Completed training session by platform staff
5. Complete MMMPP Isoflurane Use Competency Questionnaire
6. Be deemed competent by platform staff and signed off on Official Training Record

5. Experiment design considerations

- If you plan to use the anaesthesia delivery system with additional equipment such as the Doppler Imager, please make your booking for both pieces of equipment.

6. Monitoring

Animals must be monitored continuously for maintenance of an adequate depth of anaesthesia, such that they are unresponsive to tactile stimuli. Additional monitoring requirements will vary depending on purpose of the anaesthetization so refer to the specific ethics approval documents.

7. References

<https://www.kentscientific.com/products/somnosuite/>