

Introduction to Working with Rodents in Research (IWRR) (Formerly Rodent Biology and Husbandry)

Hands-on Laboratory

This lab includes introduction to:

Clinical assessment

 Recognition of common spontaneous illnesses in rodents. Discussion of causes, grading of severity, treatments and humane endpoints.

Monitoring and recognition of pain in post-procedure animals

Discussion on how to design a monitoring sheet based on the procedures that will be performed using animals and what clinical or pain signs to look for (and recognize). Videos will be used and students will "score" the clinical signs they observe to guide decisions to frequency of monitoring, provide supportive care, and determine humane endpoints.

Handling

 Routine handling will be discussed and demonstrated and students must demonstrate skill in the gentle, humane handling of rats or mice.

Husbandry

 Discussion on how the environment provided to rodents can impact their welfare and research results.

• Isoflurane prior to CO₂ euthanasia

 Demonstration of humane euthanasia of rats or mice using isoflurane anesthesia followed by CO₂ as well as demonstration of the secondary physical methods to confirm death.

Gross Necropsy

 Demonstration of the normal anatomy and recognition of normal vs abnormal in rats or mice.