BSL2 IVIS

In addition to IVIS training in the general barrier

The BSL2 IVIS is old and is not under a service contract. The coolant system needs to be checked regularly and filled, and if topped off weekly the system runs great. You will be shown how to check this during training but please let preclinical imaging/Brianna know if the replacement coolant is low as this is made up of 25% ETHANOL (not the 70% EtOH provided by CM)

Steps to transfer mice from their cage to isolation chamber

- **Disconnect and Remove isolation chamber from IVIS before initialization and place inside biosafety cabinet.**
- **All work with isolation chamber and induction box must occur within a biosafety cabinet.**
- **Replace placeholder HEPA filters with new or lab specified HEPA filters.**
- Confirm male/female connection joints are correctly attached for a tight, sealed fit.
- Once inside biosafety cabinet, the entire box must be disinfected with the appropriate disinfectant, provided by Comp. Med., and wiped dry.
- Disinfecting should occur during transition between one imaging sample to the next sample.
- Anesthetize animals inside induction box inside biosafety cabinet.
- Turn oxygen flow meter to 1L/min flow rate.
- Turn iso vaporizer to 3%, anesthesia may take longer to ensure animals stay down during transfer.
- Once anesthetized in the induction box, the animals may be transferred into the isolation chamber.
- After arranging the mice or tissue, carefully transfer the isolation chamber containing the mice into the IVIS light box.
- Attach female and male connectors on the isolation chamber to their corresponding HEPA filter mate on the anesthesia lines.
    - Assure that the tubes are not touching the rear wall to avoid snagging as the shelf moves up and down during data acquisition.
    - The isolation chamber should not be used in Field of View (FOV) A or B. The chamber is too tall and will hit the top of the IVIS and could possibly damage optical components.
    - Black construction paper will be very handy to cover reflecting filters and parts of the isolation chamber.

Complete image acquisition

Clean up and return animals to their housing room

- Remove isolation chamber from IVIS, place chamber in biosafety cabinet and return animals back to cage.
- Replace study specific HEPA filters with the original placeholder HEPA filters.

Turn off all equipment and place system in standby state