

Procedures – Animal Handling and Cleanup

Personal Protective Equipment (PPE)

- Tyvec suits
- Shoe covers
- Face masks
- Splash shield
- Gloves
- Hairnets

Room Setup Prior to Arrival of Animal

- Control Room is divided into clean and dirty areas as indicated by double tape lines on floor
 - Dirty area used for animal handling
- Place no entrance signs on doors
 - “Scan in Progress”
 - “Health Clearance Required”
- Bring in oximeter and oxygen tank from server room
- Remove IRC/human padding from bed
- Wipe down all surfaces and devices with sanitizing wipe
- Set down minimal bottom layer padding: large rectangle and octagon
- Cover with chuck

If IV anesthesia is being used:

- Set syringe pumps on gurney: Keep to the SIDE of the scanner, do not bring in line with the bore or place on table
- Connect syringe pump to controller from the penetration board
- Anesthesia staff will set up syringes

Animal Handling in Scanner Room

- **Make sure ALL STAFF are free of metals before entering the room**
- Place subject on the back
- **Padding should not come in contact with the animal**
- The head and neck should be straight and centered
- The nasium should be in line with the markers on the RF coil
- Verify with anesthesia staff that the breathing passage way is clear. Use additional padding if necessary
- For small animals, place hot pad underneath the body
- For large animals, place a hot pad on either side of the torso
- Bring coil into position and lock
- Place roll pads (covered by the chuck) at sides of head and hold firmly in place with clamps
- Tape vitamin E capillary tube to the chuck near the **LEFT** side of the head
- Tuck the chuck so that the face and breathing space is clear

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- For small animals, secure the oximeter over the tail or palm; verify a good reading
- For large animals, secure the oximeter on a toe that is about the size of a human finger tip; verify a good reading
- Set the oxygen pump to the **SIDE** of the bore in trash can and bring the opening to close proximity to the trachea tube
- The flow rate of the oxygen pump should be at 1 L/hr. Make sure it is flowing and not empty
- Allow anesthesia staff to administer IV anesthetics; initially set up syringes on the gurney by the door then move the gurney to far side of scanner, against the shelves
- Set sandbag over all tubes at the foot of the padding

- Landmark the head at the markers on the coil: button with light bulb and crosshairs
- Turn off landmark and send in to scan: button with person and arrows pointing to each other
- Turn on bore light to the brightest setting: button with light bulb
- All staff exit room and seal the door shut: switch above handle

Anesthesia Monitoring

- Anesthesia staff monitor animal from the clean side of the control room.
- At the dividing line, anesthesia staff remove PPE, expect for shoe covers.
- An additional pair of shoes covers is added on because staff is wearing “primate center shoes” which are dirty.
- Lab staff remove all PPE at the dividing line.
- If animal require visual inspection during scanning, 1 anesthesia staff and 1 Lab staff put PPE back on and enter scanner room.

Clean Up Procedures

- Clean-up is the responsibility of the PI and arrangement must be made prior to scheduling NHP MRI scans.
- After removal of all animals and primate-related materials and staff, clean scanner room.
 - Anesthesia staff take all sharps and biohazard materials
- Turn off all devices: oximeter, syringe pump controller, oxygen tank, bore light
- Return oxygen tank and oximeter to server room
- Collect padding into cloth bags
- Put chuck in plastic trash bag (to be put in lab's biohazard bin).
- Put on a new pair of gloves and shoe covers. With sanitizing wipes, clean:
 - scanner surfaces,
 - sand bags,

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- gurney,
- pulse-oximeter,
- oxygen tank,
- counter tops,
- door handles and
- floors (scanner room, control room, server room)
 - ⌚ begin from clean line dividing the control room.
- Throw wipes and PPE in plastic trash bag and take with you to throw away in lab biohazard
- Collect all supplies and place in cart:
 - USB hard drive
 - Clean PPE
 - Padding
 - Blood collection tubes in secondary container
 - MRI log book and datasheets
 - Calipers and tape measure
 - Earplugs
 - Sanitizing wipes