

# SUBSTANCE ADMINISTRATIONS TO & BLOOD COLLECTION FROM MICE IN-PERSON TRAINING

UNIVERSITY OF SOUTH FLORIDA  
COMPARATIVE MEDICINE

Attendee Name: \_\_\_\_\_  
Print Sign Date

## Discuss/Review:

- \_\_\_ Mouse restraint typically involves a **scruff** hold using the **non-dominant hand**.
- \_\_\_ Handle syringe in the dominant hand.
- \_\_\_ Do not recap the needle.

## Demonstrate/Assess:

### *Intraperitoneal (IP)*

- \_\_\_ Place mouse in dorsum scruff.
- \_\_\_ A **23-25g** needle is used to penetrate the lower, lateral abdominal cavity.
- \_\_\_ Needle should point in the direction of the **opposite elbow**.
- \_\_\_ Needle should be approximately **45 degrees** off mid-line and up from body surface.
- \_\_\_ Needle tip need only be advanced slightly beyond the bevel.
- \_\_\_ Deliver the substance.

### *Subcutaneous (SC)*

- \_\_\_ Place mouse in dorsum scruff.
- \_\_\_ Use a **23-25g** needle to penetrate the tented skin.
- \_\_\_ Deliver the substance.

### *Gavage (PO)*

- \_\_\_ Place mouse in dorsum scruff.
- \_\_\_ Oral, per os (**PO**) dosing, **gavage**, using a **20g x 1"** gavage needle with an "olive" or "**teardrop**" shaped tip.
- \_\_\_ Place the gavage needle with an **arcing motion** along the roof of the mouth stimulating swallowing.
- \_\_\_ Stop advancing the needle when the needle meets with **resistance**.
- \_\_\_ Deliver the substance.
- \_\_\_ **Remove** needle in an "**arcing**" motion ensuring no material is administered while removing.

## *Blood Collection Tubes*

- \_\_\_ **Serum** is collected in either a **yellow "gel"** plug tube or **red "clot"** tube.
- \_\_\_ Unclotted blood is collected in either a **green heparin**-containing or **purple EDTA**-containing tube.

### *Submandibular or Submental Phlebotomy*

- \_\_\_ Place mouse in dorsum scruff.
- \_\_\_ **Artificial tears** is applied over the proposed puncture site.
- \_\_\_ Review **location** of each vascular source (i.e., submandibular, submental).
- \_\_\_ A **20-18g** needle is introduced to the bevel.
- \_\_\_ Collect blood into a hematocrit tube or blood collection tube.
- \_\_\_ Ensure hemostasis.

### *Saphenous Phlebotomy*

- \_\_\_ Restrain the mouse using a **50ml conical tube with air holes** drilled in it.
- \_\_\_ **Artificial tears** is applied over the lateral side of the rear leg.
- \_\_\_ Grasp rear leg between the thumb and forefinger and **extend it outward**, immobilized.
- \_\_\_ A **25g** needle is used to puncture the vessel at an angle similar to performing an injection (i.e., **into lumen**).
- \_\_\_ Collect blood into a hematocrit tube or blood collection tube.
- \_\_\_ Ensure hemostasis.

Training & assessment provided by: \_\_\_\_\_  
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