Mouse dissection

EXTERNAL EXAMINATION

1. Check to see if the mouse is okay on the outside. There should be no obvious wounds, punctures or cuts. If so, notify staff. The mouse is left-right as diagramed in Figure 1.

2. Limbs (Left forepaw) Observe the paws of the mouse. In Figure 2 you will see the layout of these. See if you can identify the parts of the paw.

3. Determine the gender of your animal: Using the diagrams below, look at your mouse and circle which gender your mouse is.

PREP FOR INTERNAL EXAMINATION

5. First, pin the animal down with his/her belly facing up.

6. With your forceps, grab hold of the skin anteriorly to the urethral opening.

Using your scissors - cut along the ventral midline from the groin to the chin, being careful to only cut the skin and not the muscle wall underneath (See Figure 4 for location of incisions).

7. Next, make an incision from the start of the first incision downward to the knee on both sides of the animal. Basically, you will end up with an incision that looks very similar to an upside down “Y” (Figure 4).

8. Pull the skin back on the sides and you are ready for the examination (See Figure 5). You can see the underlying organs peritoneal wall as diagramed in the drawing.

INTERNAL EXAMINATION

9. You are going to make a similar incision as was done in Figure 4. Now you are going to be cutting through the peritoneal muscle wall and opening up the body cavity. Since the muscle wall is slightly transparent, you can easily avoid the delicate anatomy underneath (Figure 5).

10. Fold the muscle back or simply cut it off so you can have easy access to the structures in the body cavity (Figure 6).

Make observations and try to identify as many organs of this mouse as you can!
Mouse Dissection

Now, on your own mouse, identify the following organs for your instructor and have them sign off:

11. Trachea  _______

12. Diaphragm _______

13. Heart _______

14. Lungs _______

15. Rib cage _______

16. Liver _______

17. Stomach _______

18. Pancreas _______

19. Small intestine _______

20. Large intestine _______

21. Sex (M or F) _______

22. Bladder _______

23. Kidneys _______