

**9.02 Neuroscience Laboratory**  
**Spring 2006**  
**Sheep Brain Dissection**

Questions

1. When looking at an intact sheep brain from the dorsal view, can you see the Superior Colliculus?
  - a. What lies just caudal to the Superior Colliculus in rodents?
  
2. In what view is the brainstem seen best? (dorsal/ventral; circle one)
  - a. What are two of the most prominent structures visible along the ventral surface of the brain?
  
  - b. Name two structures that are located on the dorsal surface of the brainstem.
  
3. What portion of the brainstem can you see in an intact brain?
  - a. Why is the rest of the brainstem not visible? What is covering it?

4. Is the corpus callosum visible in an intact (= undissected) brain?
  - a. Is the corpus callosum white matter or gray matter?
  - b. What does it connect?
  
5. What part of the brain do you have to remove to look down on the floor of the fourth ventricle?
  - a. What lies just rostral to the structure named in 5) above?
  
6. What are the most prominent (i.e., largest) cranial nerves visible in the intact sheep brain? List four.
  - a.
  - b.
  - c.
  - d.
  - a. What structure on the ventral side of the brain looks like an x? What fibers go through here? What is the significance of the X (i.e., what happens to the projections at this point)?
  
7. In what view are most of the cranial nerves visible?
  
8. What is the most rostral cranial nerve?

9. What cranial nerve emerges from the dorsal aspect of the brain?
10. What structure do you need to remove to see the lateral ventricles?
- a. What type of cut do you need to make to view this structure?
11. The optic tract courses over the surface of two divisions of the brain. Name the two divisions:
12. On what surface of the brain does the cerebellum lie? (medial, lateral, dorsal, ventral; circle one)
13. How would you approach the hippocampus in a gross dissection of the brain; what structure needs to be removed?
14. Is the pineal body visible in an intact brain? (yes/no; circle one). It sits above the \_\_\_\_\_ (thalamus, midbrain, hindbrain, cerebellum; select one)
- a. What part of the brain do you have to remove to view the pineal body?
15. What structures do you have to remove to see the entire brainstem?

16. Make a coronal cut and a parasagittal cut of the cerebellum.
  
17. Make a coronal cut of the rostral part of the brain.
  
18. Name two major differences between the neocortex and cerebellar cortex that are grossly visible during a dissection.
  
19. Make a midsagittal cut of the brain.
  
20. Name two white matter tracts that interconnect the two halves of the brain.