9.14

Class #1: Introduction to the Structure of the Nervous System

Readings:

Butler, AB, and Hodos, W. "Terms Used in Neuroanatomy", *Comparative Vertebrate Neuroanatomy – Evolution and Adaptation*, Wiley-Liss, 1996.

Jhaveri, S., "Some Standard Terminology Used in Neuroanatomy" (handout given in class)

Questions:

- 1) How do we talk about the brain such that we can understand each other? What is the basic standard terminology with which you should all be familiar?
- 2) What is the nature of the central nervous system (CNS)? (as a tissue, as a system, as a secretory organ). What are its basic elements?
- 3) How do we define and recognize specific cell groups in the CNS? (cyto-, fibro-, chemo- architecture)
- 4) How do we know about connectivities between cell groups? (tracers--old, new; electron microscopy)
- 5) How did the brain become the way it is? (descriptive and experimental studies of development and plasticity)