

Readings Study Questions **LECTURE 26**

on Gazzaniga Chapter 4 (pages 121-161)

1. Draw the visual pathway from the retina to visual cortex through the LGN. Label nasal and temporal retina, the ipsilateral and contralateral projections, and the optic chiasm. Where do the retinal ganglion cell axons make synapses?
2. How are the retinal axons organized in the LGN? How are the geniculate axons organized in visual cortex?
3. What is meant by an "orientation column" in visual cortex?
4. What feature of a cell's anatomy might determine its receptive field? Can you think of one way "center-surround" receptive field organization could be generated in a retinal ganglion or LGN cell?
5. Describe one experiment that provides evidence for parallel processing in the visual system.
6. Were blindsight experiments in humans with striate cortex (visual cortex) lesions informative about the functions of sub-cortical areas in vision? Why or Why not?

7. Describe one difference between the type of information processed by visual pathways projecting to the LGN and the superior colliculus.