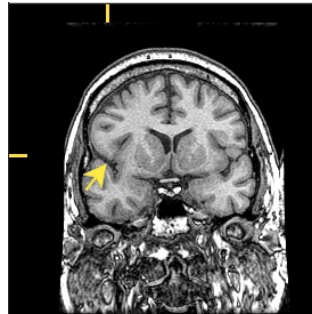


# PSYCH 260 Quiz 1

February 2, 2016

## 1 Main - 10 pts



1. The image illustrates what type of slice?
  - A. Sagittal
  - B. Horizontal
  - C. Coronal**
  - D. Axial
2. All of the following structures can be seen in the figure EXCEPT
  - A. Corpus callosum
  - B. Gray matter
  - C. 4th ventricle**
  - D. Cerebral cortex
3. The figure illustrates the use of \_\_\_\_\_magnetic resonance imaging (MRI), a technique with \_\_\_\_\_spatial resolution.
  - A. functional; fair ( $\sim 3+$  mm)
  - B. structural; good ( $\sim 1$  mm)**
  - C. neural; excellent ( $\sim 1$  micron)
  - D. diffusion tensor; poor ( $\sim 1$  cm)
4. Which Greek philosopher believed that the heart, not the brain, was the mental center of the body?
  - A. Aristotle**
  - B. Galen
  - C. Vesalius
  - D. Descartes

5. Beginning with Galen, many early thinkers thought that fluid, flowing between the \_\_\_\_\_, was important to thought, feeling, and action.
- A. synaptic vesicles
  - B. dura mater
  - C. cerebral ventricles**
  - D. pineal gland
6. The occipital lobes are \_\_\_\_\_ to the frontal lobes.
- A. posterior**
  - B. anterior
  - C. rostral
  - D. medial
7. Visual information enters the CNS via the 2nd (II) cranial nerve and projects both to the thalamus and to the \_\_\_\_\_ in the midbrain tectum.
- A. lateral geniculate nucleus
  - B. striatum
  - C. substantia nigra
  - D. superior colliculus**
8. All of these structures are components of the hindbrain EXCEPT:
- A. pons
  - B. tegmentum**
  - C. cerebellum
  - D. medulla oblongata
9. Optogenetic neural stimulation techniques are \_\_\_\_\_ methods with \_\_\_\_\_ spatial and temporal resolution than functional MRI (fMRI).
- A. structural; higher
  - B. functional; higher**
  - C. structural; lower
  - D. functional; lower
10. Anterograde and retrograde histochemical tracers help neuroscientists determine
- A. what stimuli best activate a brain region.
  - B. what connects where.**
  - C. when to stimulate a brain region for maximum effect.
  - D. whether a brain area is functioning normally.

## 2 Bonus

11. This forebrain structure in the diencephalon controls both the autonomic nervous system and the endocrine system.
- A. Hippocampus
  - B. Thalamus
  - C. Medulla
  - D. Hypothalamus**
12. The figure on page 1 shows two parts of the brain that are structurally related to one another, the \_\_\_\_\_ and the \_\_\_\_\_.
- A. lateral fissure; temporal lobes.**
  - B. spinal cord; lateral ventricles.
  - C. amygdala; tectum.
  - D. basal ganglia; 4th ventricle.