

580.422 System Bioengineering II: Neurosciences (Spring 2015)

Recitation #5 Review Questions

February 26th, 2015

Question 1

List the steps in phototransduction, from absorption of photons to change in transmitter release by photoreceptors (rods/cones).

Question 2

Visual information originates in eye-centered spatial coordinates but is transformed into other coordinate systems by higher-level visual cortex.

a) What is the spatial coordinate system in the ventral pathway, and why is it functionally advantageous?

b) What is the spatial coordinate system in posterior cingulate cortex (part of the dorsal pathway), and why is it functionally advantageous?