Ganglion Cell
Receptive Fields
Retinal Network

- Photoreceptors (rods; cones)
- Horizontal cells
- Bipolar cells
- Amacrine cells
- Ganglion cells
def: “Receptive Field”

The area of the retina which influences a given sensory neuron, by way of either excitation or inhibition, is known as that neuron’s receptive field. (p. 286)
RGC Recording Protocol

Micro-Electrode

Stimulus Screen
Concentric Organization
(Center-Surround Antagonism)
Results of Variable Stimulation
Can you rank-order these stimulus patterns in terms of the retinal ganglion cell’s firing rate?

(From Slowest to Fastest)
Architecture of Center-Surround Antagonism
Vertical and Horizontal Stream Antagonism

Ganglion Cell ➔ Amacrine ➔ Bipolar Cell ➔ Photoreceptor

Ganglion Cell ➔ Horizontal ➔ Bipolar Cell ➔ Photoreceptor