        - Magnocellular pathway – involved in motion processing, good temporal resolution
        - Input received from diffuse bipolar cells (rods)

- Centre-surround receptive fields (region on retina where stimuli influences a neuron's firing rate)
    - Sensitive to differences in light intensity
    - On and off centre ganglion cells – receive input from on and off-centre bipolar cells
    - **On-centre**: increases firing when light falls on centre of receptive field, inhibited by light that falls in surround
    - **Off-centre**: inhibited when light falls on centre, excited when light falls in surround
    - Help emphasise object boundaries (edges) and code light & dark
    - Each cell responds best to spots of a particular size – act as filter
    - Unaffected by intensity in light – most sensitive to differences in the intensity of light

Lecture 2 – Spots to stripes, early visual processing (Ch. 3)

- LGN – 6 layers
    - Magnocellular
        - M ganglion cells (rods)
        - Responds best to large, fast moving cells
        - Bottom 2 layers
    - Parvocellular
        - P ganglion cells (cones)
        - Slower to respond
        - Top 4 layers
    - Koniocellular
        - In between

- Striate cortex organisation
    - Orientation tuning
        - Neurons respond most to bars of a certain orientation
        - Cells give graded response
        - Firing rate high for vertical oriented bar presented in middle
        - Every neuron has a preferred orientation
    - Spatial frequency
        - Cycles of grating
        - Number of times a pattern repeats
        - Visual angles
        - Some neurons like fine info, some like coarse info
        - Sensitivity changes – low lighting (scotopic) rods are most active –

high spatial frequency, coarse detail *vs.* photopic conditions cones are more active – low spatial frequency, fine detail

- Low spatial frequency = processed faster