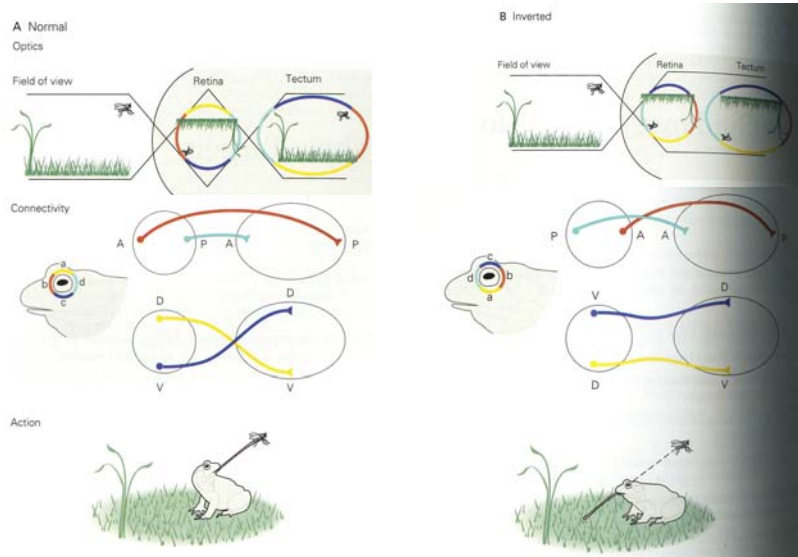
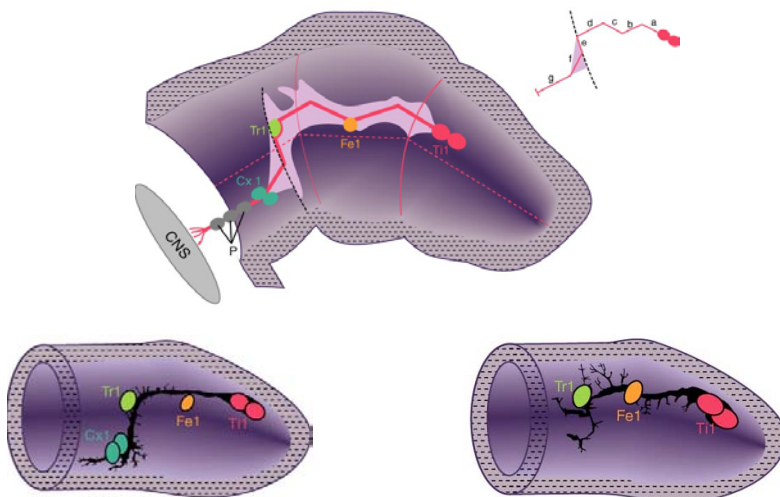


Topographic map of the visual system



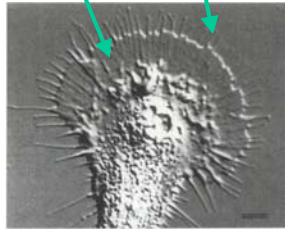
Stepwise guidance of axons in the grasshopper limb



Cx1 neuron is required for the formation of the trajectory from Tr1 to Cx1.

Structure of the growth cone

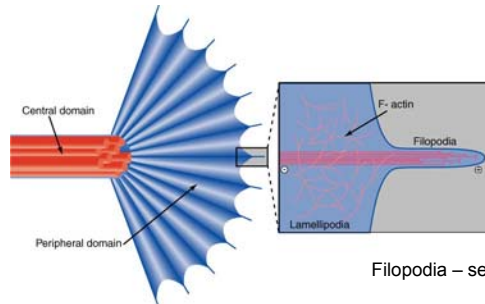
lamellipodium filopodium



Actin is concentrated in filopodia and lamellipodia



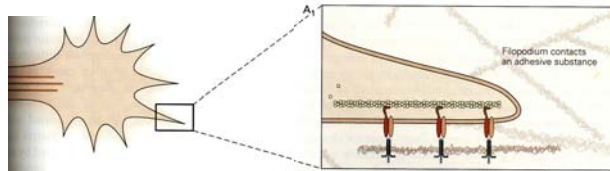
Microtubules are concentrated in the central core of the growth cone



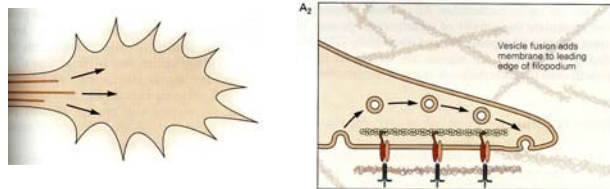
Filopodia – sensory ability of the GC.

Growth cone extension

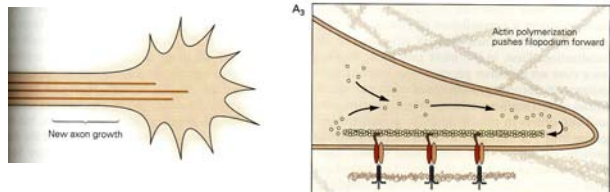
Filopodia extended



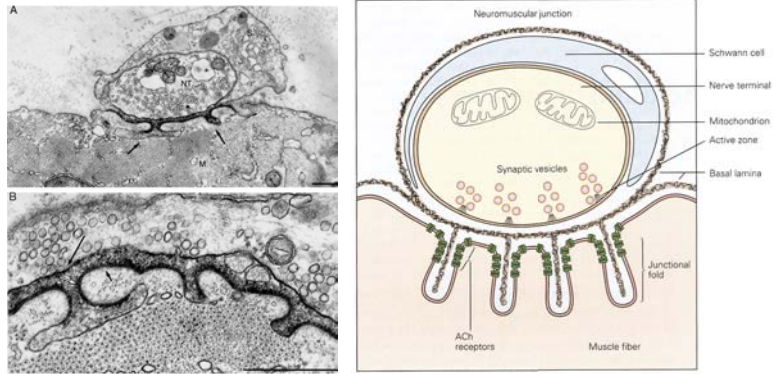
Microtubules from central core advance



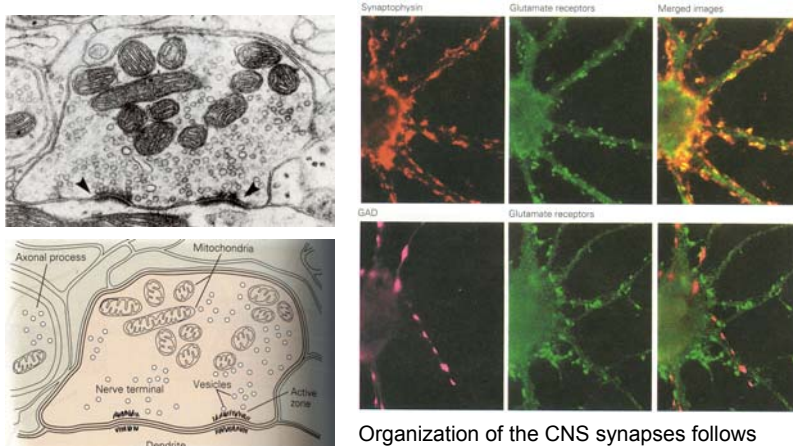
Cytoplasm collapses to create new segment of axon



Neuromuscular junction (NMJ) is the best studied system for synapse formation



Synapse in the mammalian central nervous system (CNS)



Organization of the CNS synapses follows similar principles used at the NMJ, but less well understood due to its complexity.