NEU10002 Notes

(Disclaimer: I do not own any of these images, all were sources through Swinburne University of Technology)

Tissues

Sensory neurons- afferent, to CNS

Inter neurons- small, linking, tend to be inhibitory

Motor neurons- efferent, signals away from CNS to muscles/sensory organs

Soma/cell body- contains nucleus

Dendrites- incoming communication

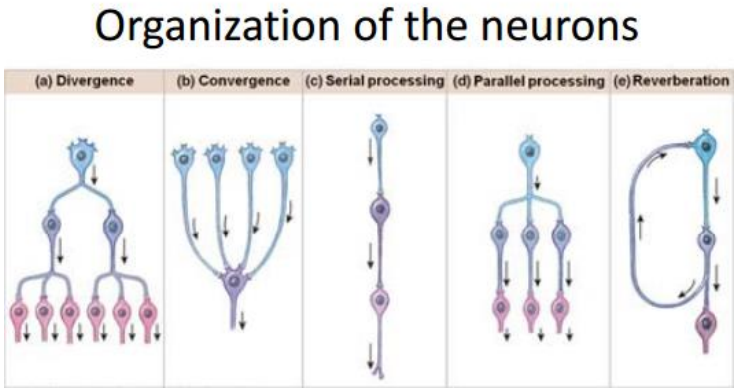
Axon hillock- leads to axon

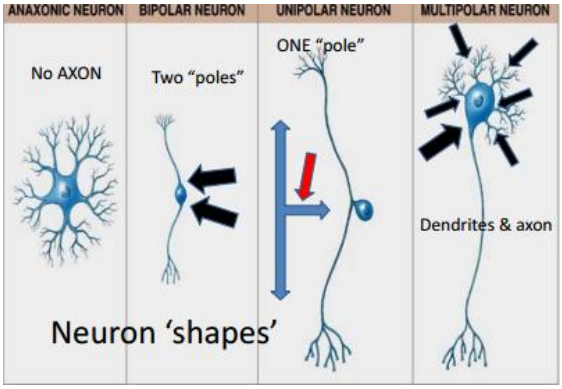
Axon- propagates electric signal (membrane=-axolemma)

Collateral branches- spreads outgoing signals

Telodendria- end branches

Synaptic terminals- ends of telodendria, release neurotransmitters (n/t)





White matter- myelin sheaths

Grey matter- axons

Neuroglial- specialized support cells

Astrocytes- most abundant, CNS, development/repair, in interstitial fluid and blood brain barrier (BBB)

Oglildendrocytes- myelin of CNS

Ependymal cells- CNS, cerebrospinal fluid production and flow

Microglia- CNS, scavenging, defense, repair

Satellite cells- PNS, protection of ganglia neurons

Schwann cells- PNS, protective layer (neurilemmal), wraps around axon to form sheath

Excitation

Resting potential- -70mV

Action potential- +30 mV

Graded potential- temporary localized changed in resting potential

Synaptic activity- graded potential in post-synaptic cell

Absolute refractory period- immutable, no further activity can occur

Relative refractory period- potential for further action to occur