

Neurons - presentation 2

- Structure of plasma membrane is described according to the fluid mosaic model

↳ phospholipid bilayer → hydrophilic phosphate head
↳ hydrophobic lipid tail

- plasma membranes also have integral + peripheral membrane proteins

1) Peripheral^s

2) Cytoskeleton: anchors to PM, interacts w/ receptors

3) Glycocalyx: carbs on lipids + proteins on cell surface

4) Cholesterol: reduces fluidity + stabilizes structure

Plasma membrane ^{proteins} functions

- transport, intercellular joining, enzyme activity, cell & cell recognition, receptors for signal transduction, attachment to ECM

Plasma membrane functions

- barrier, are selectively permeable ∴ cell responds to extracellular changes. It also allows cells to interact / recognize each other

Simple diffusion

↳ nonpolar, lipid ex O₂, fat, urea follow gradient

Facilitated diffusion; carrier

↳ specific to molecules, no ATP, limited cuz no. of carriers limited, inhibition may occur

channel mediated

↳ selective cuz of size of pore
can be inhibited, specific to mole.

down [] gradient

↳ some leak (always open)

↳ some are gated ∴ control