Plasma membrane
(Cell Membrane) DAT

→ All cell remain covered by Plasma membrane. The plasma membrane is quite separate and should not be confused with the cell wall which lies out side the cytoplasm.

→ outer living limit of cell but not necessarily its outer boundary. Such outer boundaries are most commonly found in plant cell many of which posses heavy wall of cellulose.

⇒ cell membrane is double in nature and 10 A° (A° = Angstrom Unit) thick. This membrane connected with the nuclear membrane through the endoplasmic reticulum.

→ Selectively permeable

Model of Plasma membrane

Trilaminar – three layered

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Lipid + Protein molecule

Trilaminar nature of plasma membrane Proposed by Danielli & Davson (1935)

DATE

Harvey and Danielli (1938) of plasma membrane which has shown a bimolecular lipid structure in between two outer and inner layer of protein molecules. Electron microscope revealed the

Protein – Lipid – Protein

arrangment in plasma membrane.

Robertson (1959) found wide occurance of such trilaminar composition.

three kinds of theories and models
⇒ Lamella theory
⇒ micellar theory
⇒ fluid mosaic theory

Proposed by

– Singer and Nicolson (1972)
– Best explaining properties of Plasma membrane
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