

Plasma Membrane

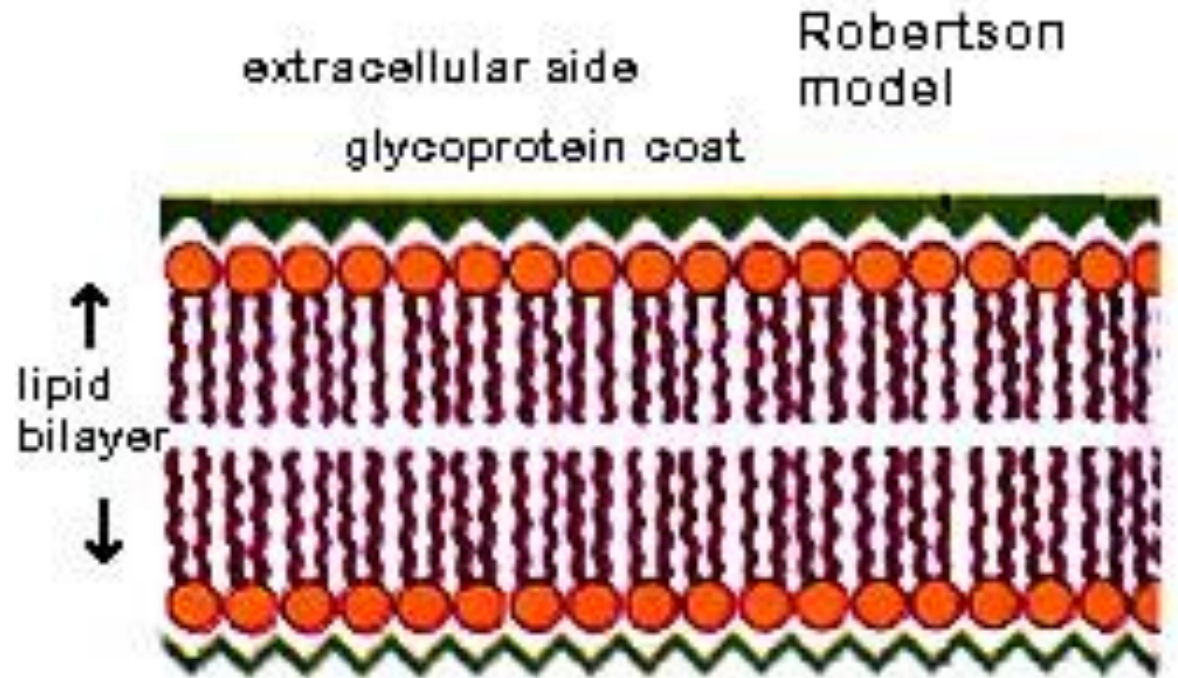
(Unit Membrane Concept)

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Dr. Rupesh B. Yadav

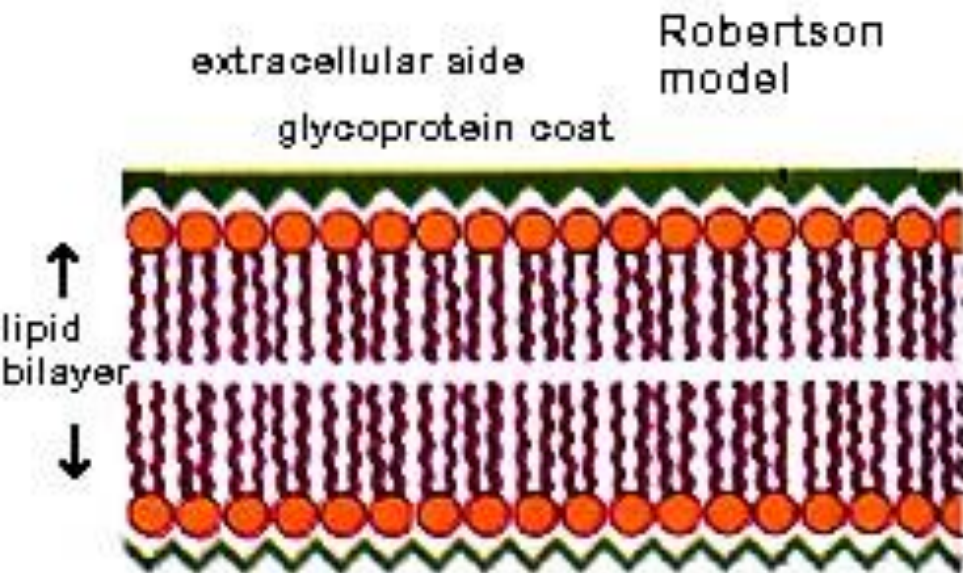
Asst. Prof.

TC College, Baramati.

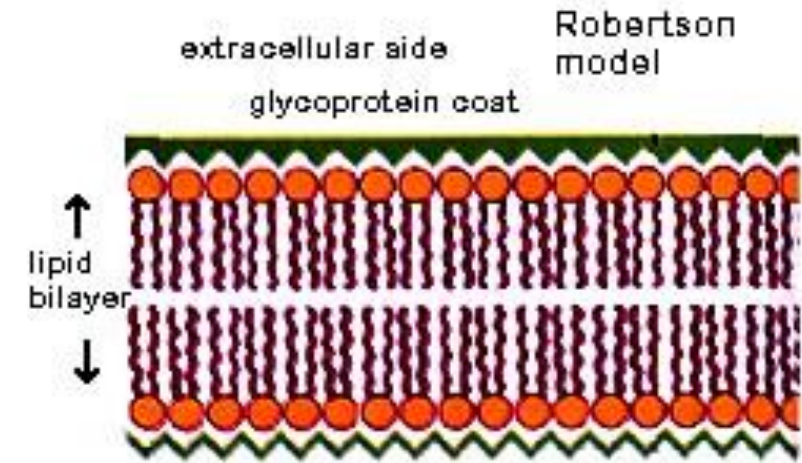


Unit membrane Concept

David Robertson in 1959



Unit membrane Concept

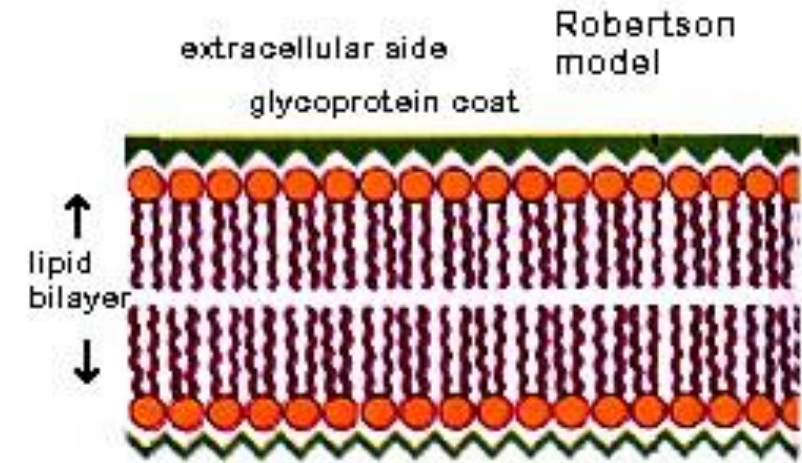


➤ **Robertson suggest that**

- ✓ **Plasma membrane is made up of protein & Phospholipid molecule.**
- ✓ **Phospholipid molecule are amphipathic.**
- ✓ **Arrangement of Phospholipid is same as like sandwich model.**
- ❖ **β fibres protein are found on the surface of Phospholipid bilayer.**
- ❖ **Thickness of Plasma membrane is 75 – 100 A°**

Sandwich model concept

Properties of model

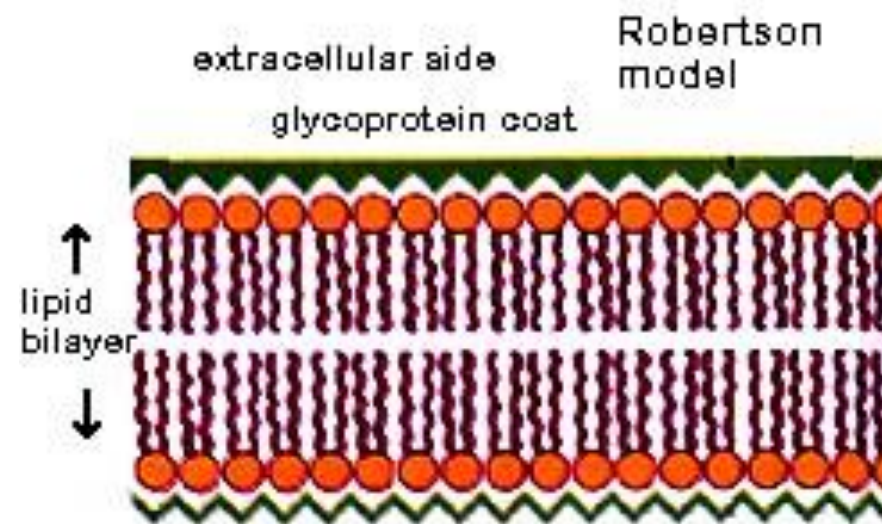


- **Fat soluble** molecule can **easily enters** in the cell body
- **Water soluble** molecule can enters **up to the head part of Phospholipid layer**
- **Water soluble** molecule **can't enters** in to the cell body

Unit membrane Concept

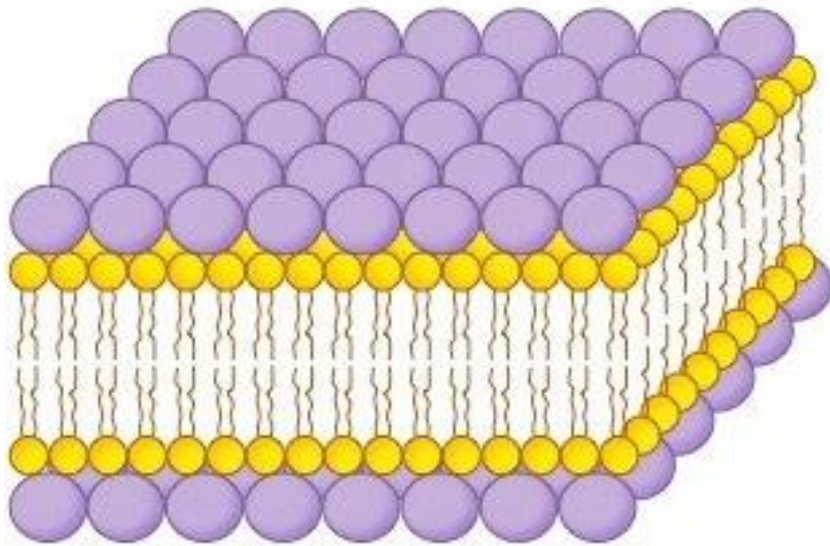
Problem in model

- Model did **not confined** the variable number of protein & phospholipid molecule.
- Model did **not confined** the dynamic nature of plasma membrane.
- **Not clearly proposed** the entry of water substances in the cell body.

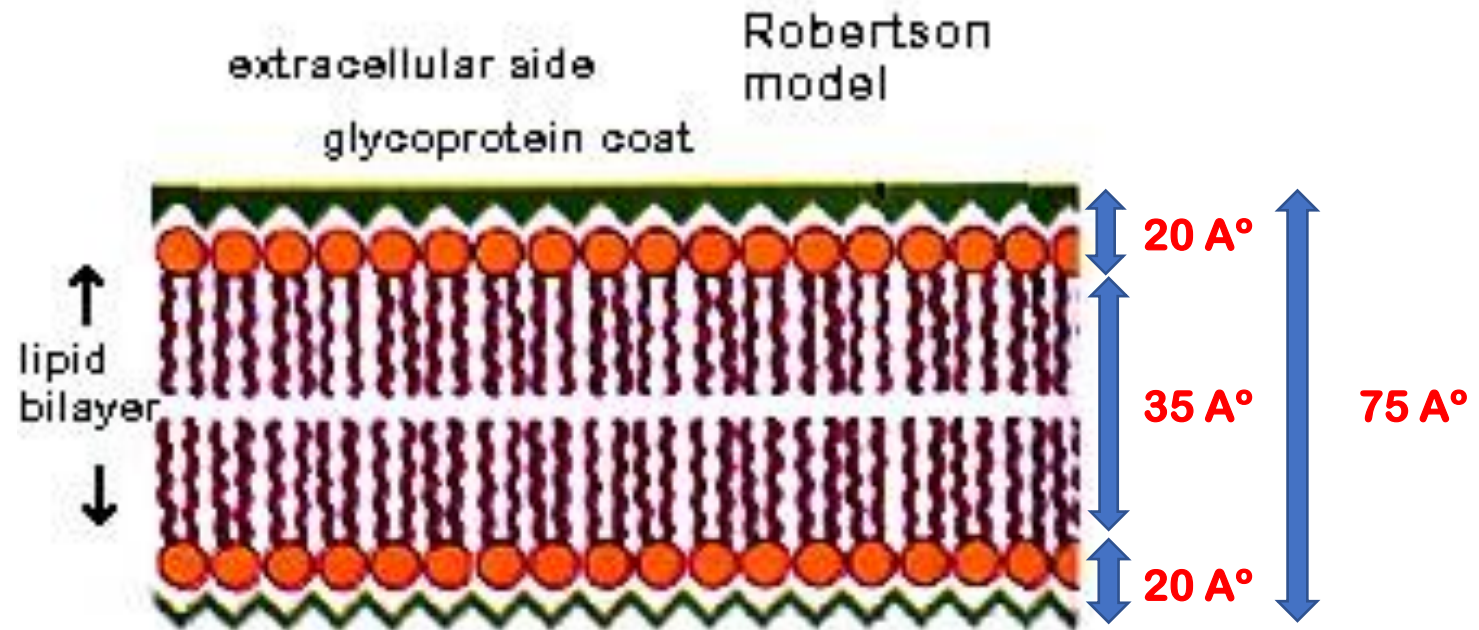


Difference between Sandwich model & Unit membrane Concept

Davson-Danielli Model (1935)



Proteins form distinct layers (*sandwich*)



*Thank
You*

