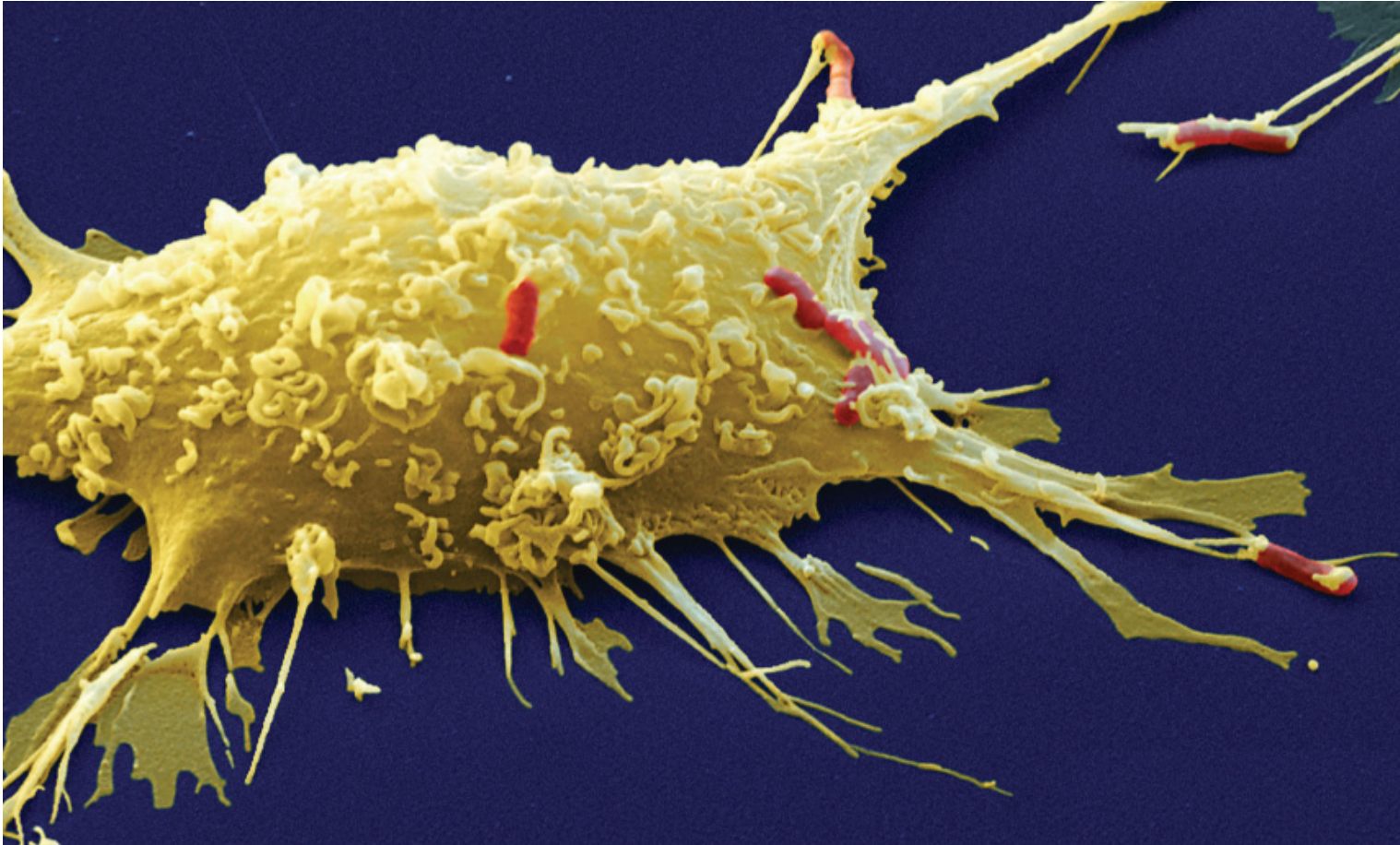


3.3 Cell Membrane

KEY CONCEPT The cell membrane is a barrier that separates a cell from the external environment.

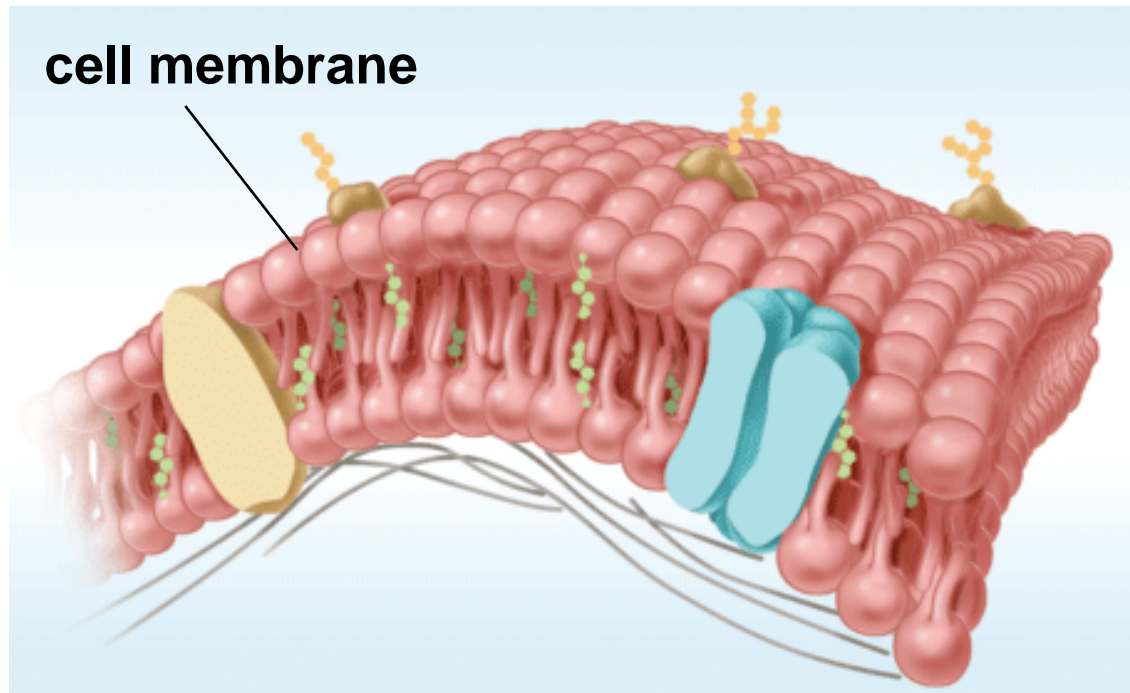


3.3 Cell Membrane

- ▶ Cell membranes are composed of two phospholipid layers.

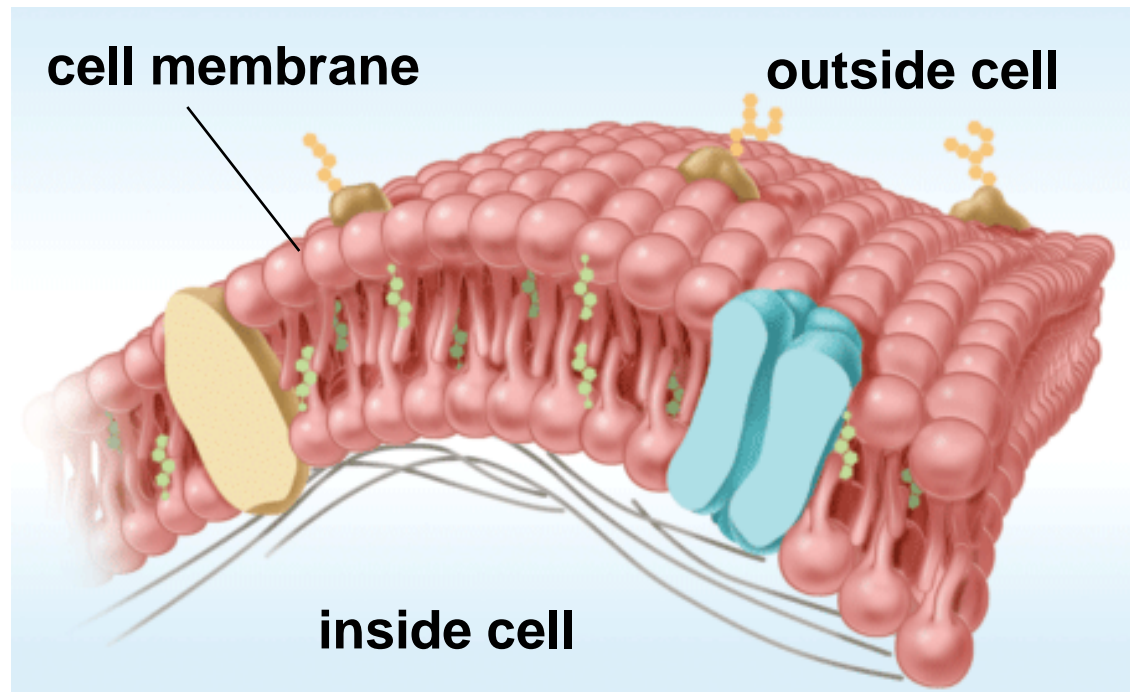
3.3 Cell Membrane

- ▶ **Cell membranes are composed of two phospholipid layers.**
 - The cell membrane has two major functions.



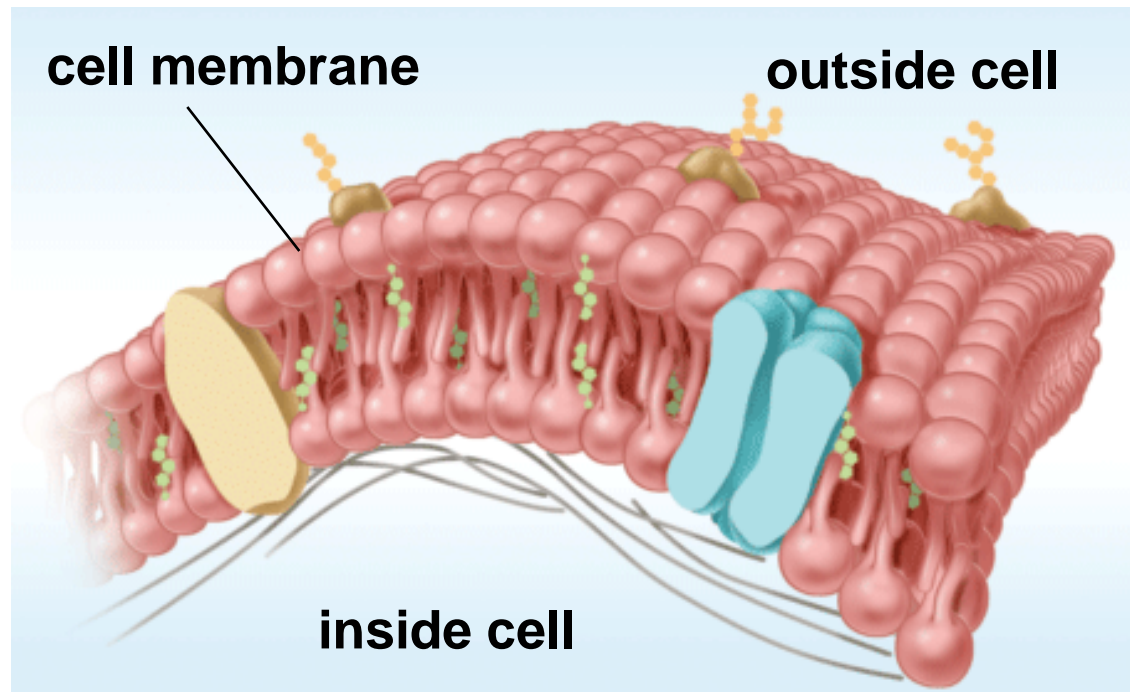
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 - The cell membrane has two major functions.
 - forms a boundary between inside and outside of the cell



3.3 Cell Membrane

- ▶ **Cell membranes are composed of two phospholipid layers.**
 - The cell membrane has two major functions.
 - forms a boundary between inside and outside of the cell
 - controls passage of materials

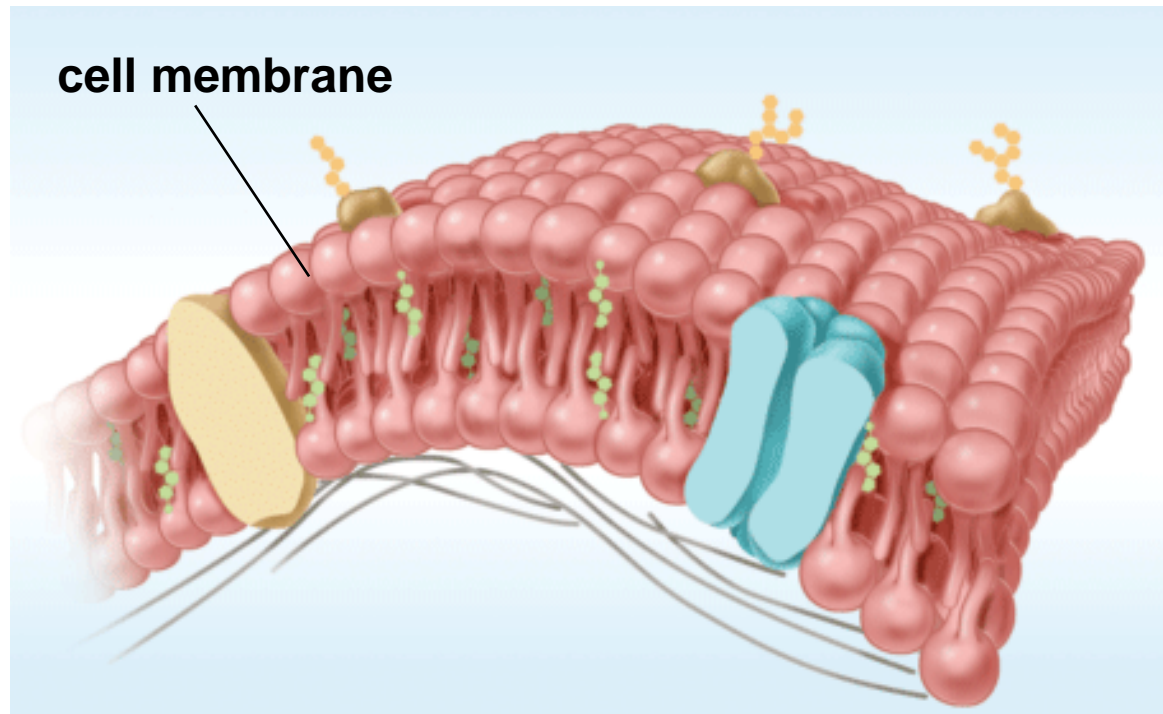


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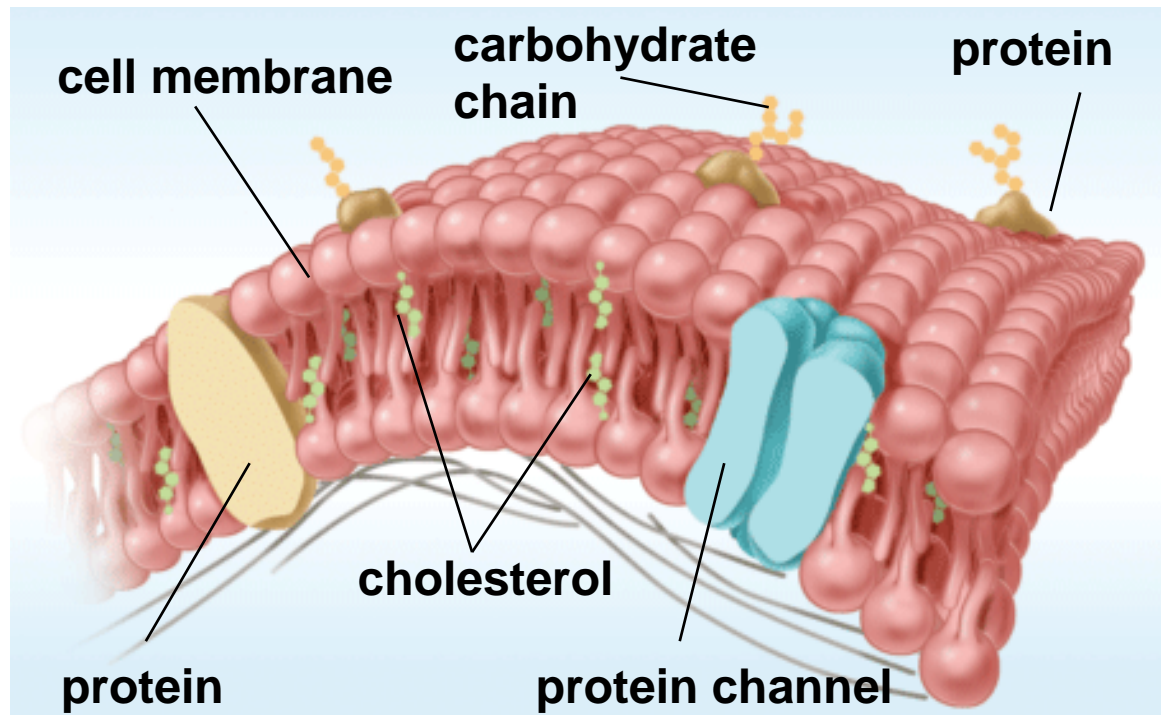
3.3 Cell Membrane

- ▶ **Cell membranes are composed of two phospholipid layers.**
 - The cell membrane is made of a phospholipid bilayer.



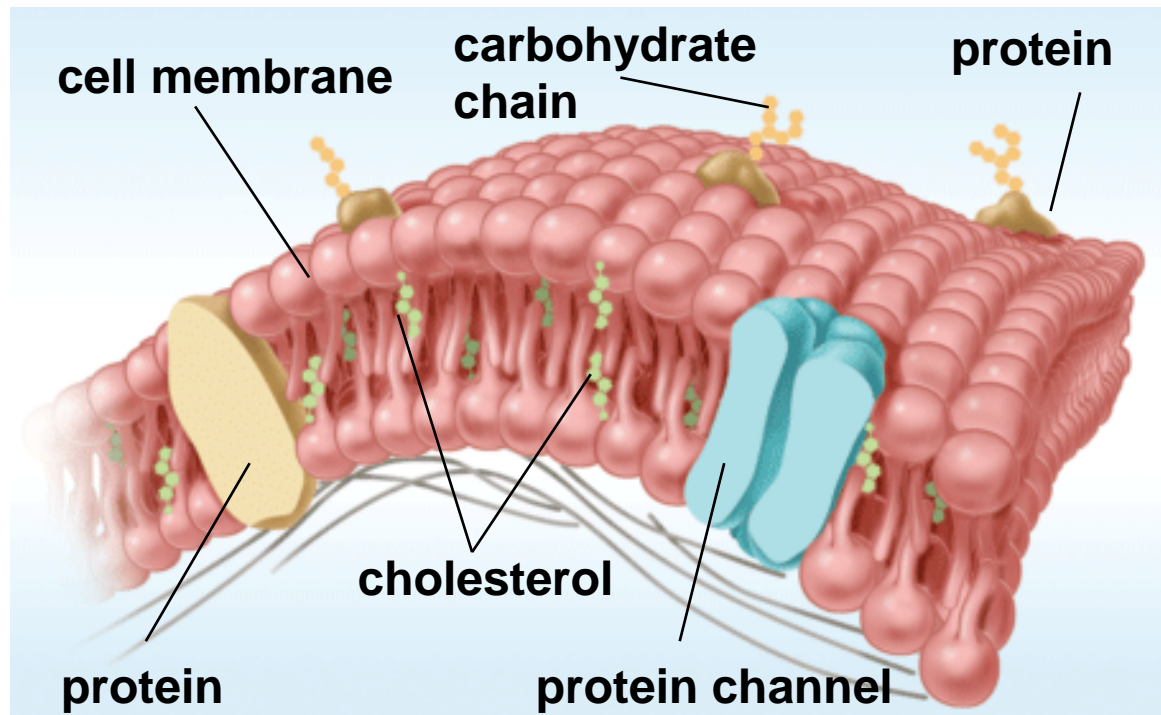
3.3 Cell Membrane

- ▶ **Cell membranes are composed of two phospholipid layers.**
 - The cell membrane is made of a phospholipid bilayer.
 - There are other molecules embedded in the membrane.



3.3 Cell Membrane

- ▶ **Cell membranes are composed of two phospholipid layers.**
 - The cell membrane is made of a phospholipid bilayer.
 - There are other molecules embedded in the membrane.
 - The fluid mosaic model describes the membrane.

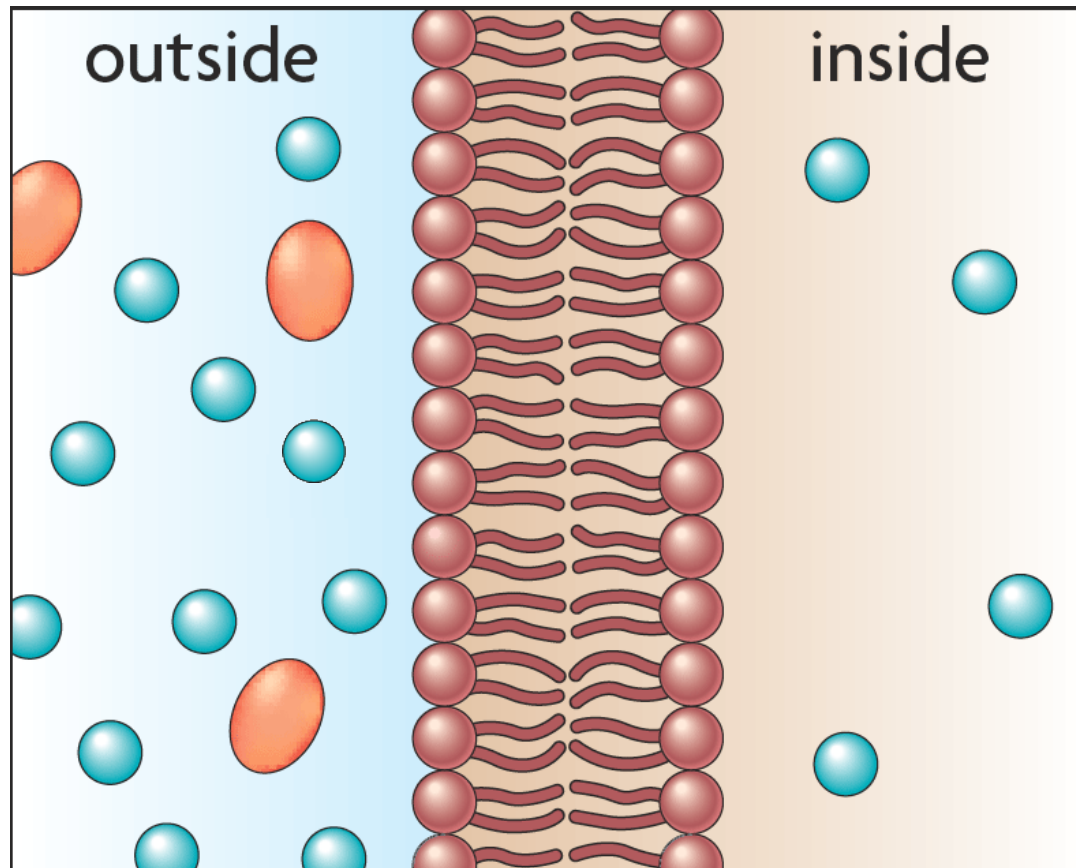


3.3 Cell Membrane

- ▶ Cell membranes are composed of two phospholipid layers.

3.3 Cell Membrane

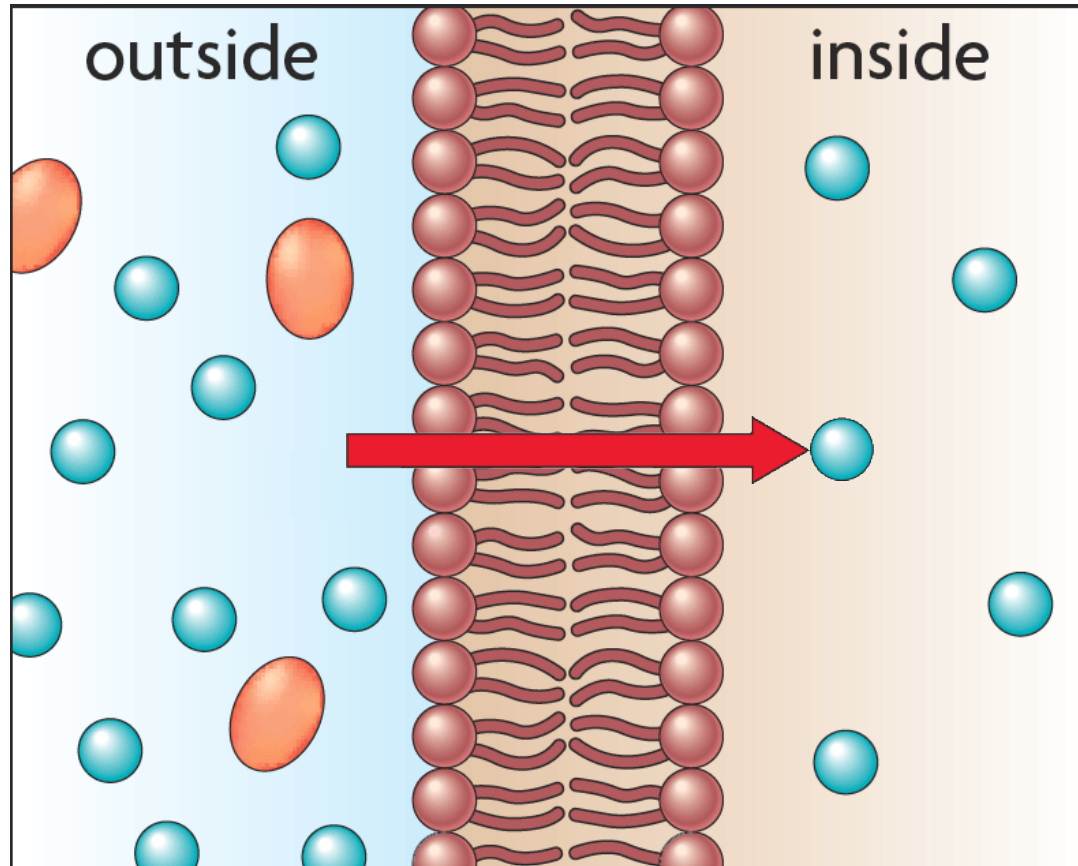
- ▶ **Cell membranes are composed of two phospholipid layers.**
- The cell membrane is selectively permeable.



Some molecules can cross the membrane while others cannot.

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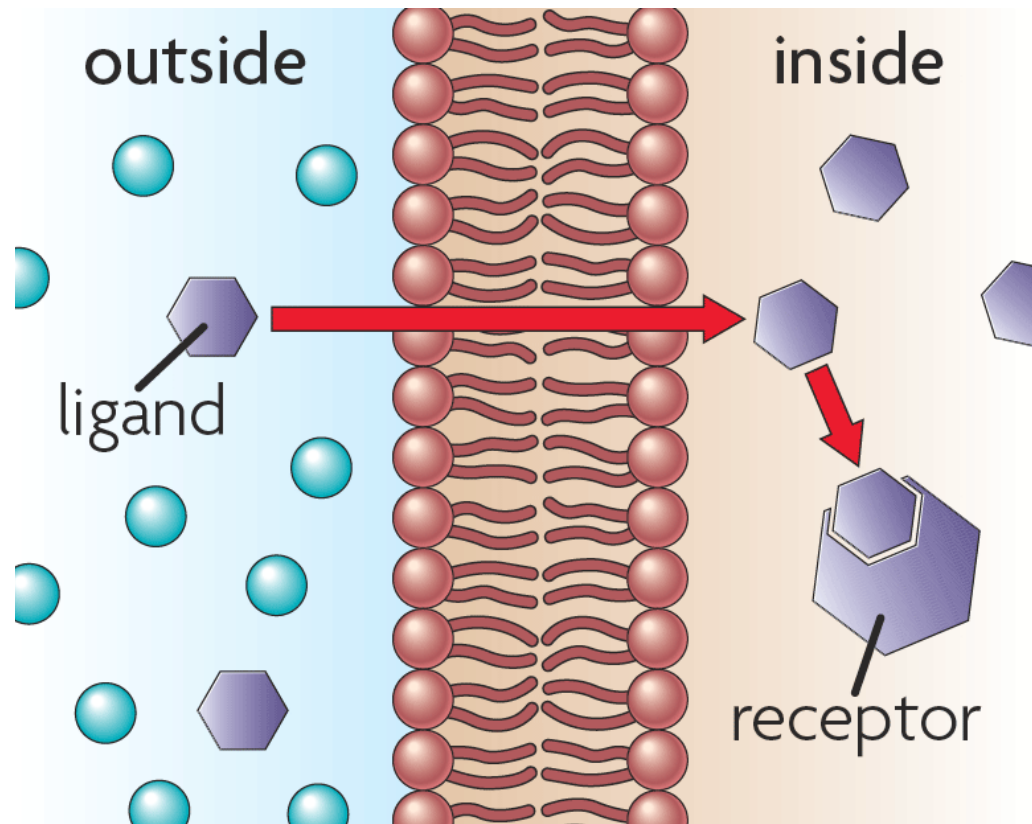
3.3 Cell Membrane

- ▶ **Chemical signals are transmitted across the cell membrane.**
 - Receptors bind with ligands and change shape.
 - There are two types of receptors.

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- Receptors bind with ligands and change shape.
- There are two types of receptors.
 - intracellular receptor
 - membrane receptor

