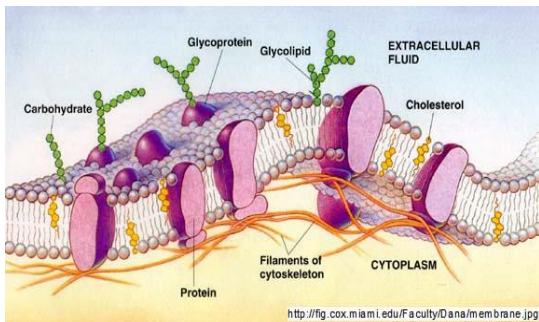


Lipid Vocabulary

Plasma (Cell) Membrane

Cell Membrane



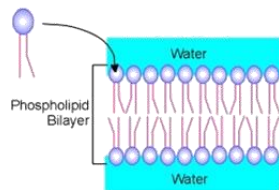
Why is the plasma membrane so important?

1. Protect cell from outside
2. Selective barrier filtering which substances enter/leave the cell
 - semi-permeable/semi-selective
3. Used to take in needed nutrients.
4. Used by cells to excrete waste products.
5. Used to communicate with other cells
6. Identification

Membrane Components

1. Two layers of phospholipids

- “phospholipid bi-layer”
- Physical barrier
- Controls what enters and exits



Membrane Components

2. Proteins

- a) Transport
 - create channels and pumps to move substances across the membrane
- b) Receptors
 - act like an antenna receiving chemical signals (hormones) from other cells
- c) Enzymes
 - Speed up chemical reactions

Structure

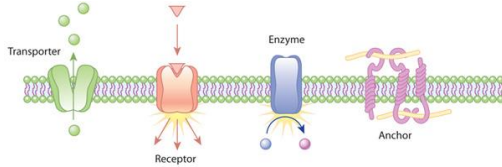
2. Proteins

d) Cell adhesion

- Forms junctions between cells

e) Anchor

- Attachment to cytoskeleton; holds cell shape



Structure

3. Cholesterol

- Adds fluidity to membrane

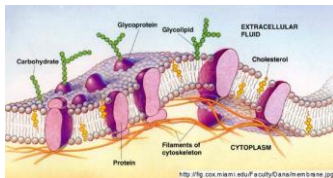
4. Carbohydrates

- Extracellular side ONLY
- stick off creating a “face”
- Used for identification
- Ex. Blood types; self cells vs. donor cells



Fluid Mosaic Model

- Fluid:
 - Phospholipids (and proteins) move sideways
- Mosaic:
 - Made of different molecules



Membrane Vocabulary