

GOLGI APPARATUS -2

CISTERNAE

- Golgi apparatus is made up of approx 4- 8 cisternae .
- Usually equally spaced in stark separated from each other by thin layer of intercisternal cytoplasm .
- Golgi complex has a distinct polarity ,the two poles are cis and transface responsible for receiving and shipping departments.
- Forming (cis)face-convex side of stack,Maturing(trans)face-concave side of stack.
- Secretory material $\xrightarrow{\text{from}}$ smooth endoplasmic reticulum $\xrightarrow{\text{via}}$ transport vesicles $\xrightarrow{\text{reaches}}$ golgi complex.

Tubules & vesicles :-

Tubules: - small, round tubules formed from the periphery of the cisternae .

- And few get enlarged at the end to form vesicles.

Vesicles:-lie near the end and concave surface of the golgi complex

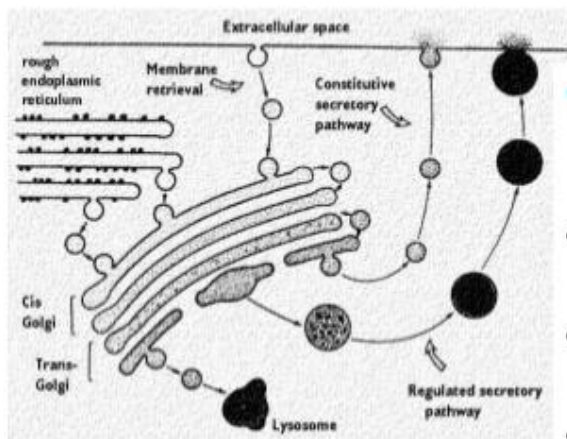
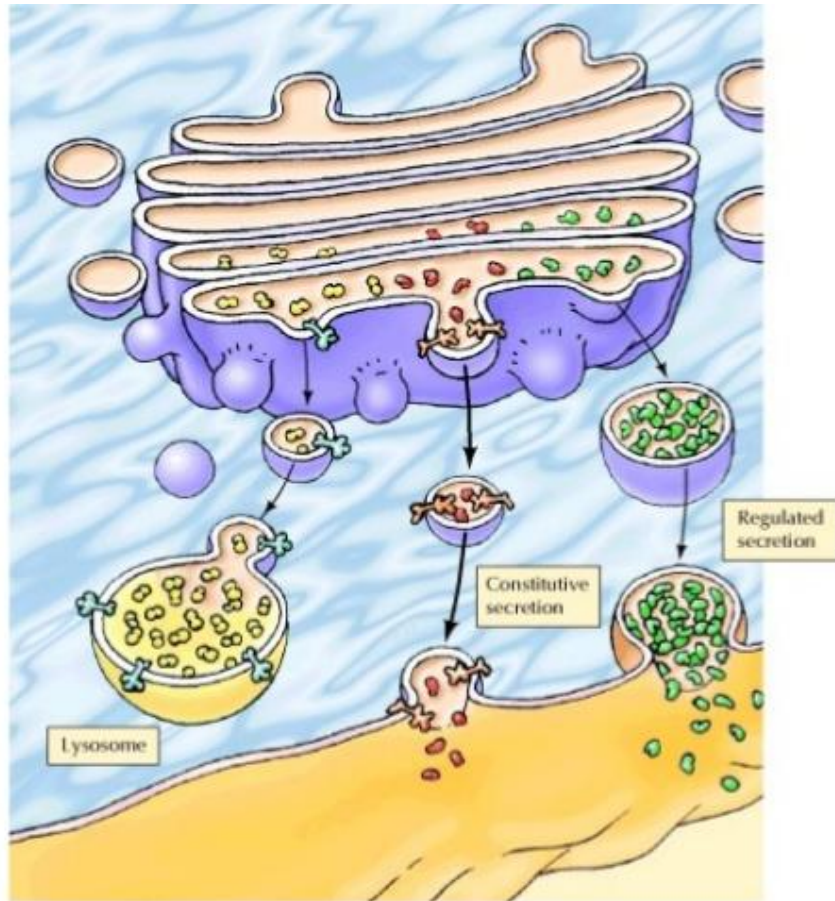
- Types of vesicles:-smooth vesicles and coated vesicles

Golgi matrix:-all golgi elements filled with a fluid.

FUNCTIONS

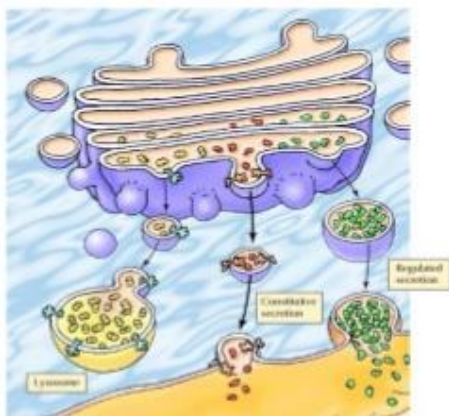
- ❖ SECRETION
- ❖ SYNTHESIS
- ❖ SULFATION
- ❖ APOPTOSIS
- ❖ PHOSPHORYLATION






- The Golgi complex controls trafficking of different types of proteins.

- Some are destined for **secretion**.
- Others are destined for the **extracellular matrix**.
- Other proteins, such as **lysosomal enzymes**, may need to be sorted and sequestered from the remaining constituents because of their potential destructive effects



SECRETION

- Golgi complex plays an important role in secretion.
-  Production of proteoglycans

Continued.....