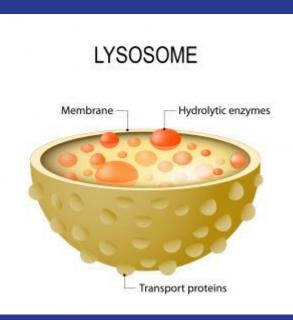


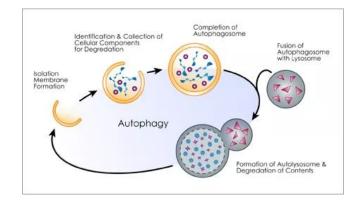
#### The Digestive System of the Cell

**Alvin Leong** 



# Major Processes

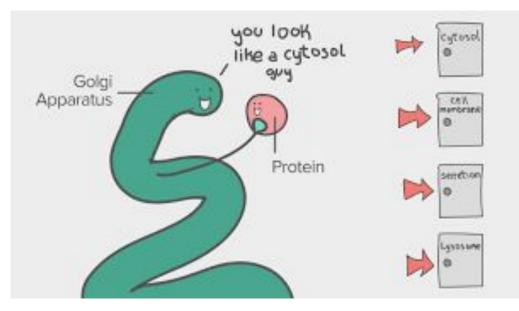
- Digests macromolecules in animal cells by using enzymes(endocytosis), engulfing a food vacuole and using the enzymes to digest.
- Breaks down worn out organelles(autophagy), recycling useful monomers and shooting them back into the cytosol.
- Breaks down foreign bacteria and dead cells(phagocytosis)
- Can also break down things outside the cell(heterophagy)





## Interactions

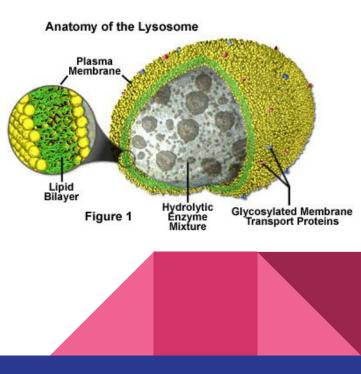
- Lysosomes are products of the ER's proteins that are packed by the golgi body into a vesicle which creates the lysosome.
- Releases recycled material into cytoplasm, along with receiving things from the cytoplasm.





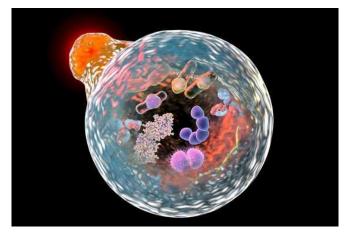
## **Relation of Structure to Function**

- Spherical in shape like a vacuole and attaches to its target and releases the enzymes.
- The lipid bilayer is necessary so the acidic enzymes are contained, as they can be harmful and digest organelles.



# Molecules Used and the End Project

- Lysosomes use enzymes to digest and carry out their job in a cell.
- The result of digestion is usable macromolecules that can be recycled into the cell for reuse or just use later in the cell





## Citations

-Cooper, G. M. (1970, January 01). Lysosomes. Retrieved from https://www.ncbi.nlm.nih.gov/books/NBK9953/

-Structure and Functions of Lysosomes. (n.d.). Retrieved from http://www.ivyroses.com/Biology/Organelles/Lysosomes.php

-Andrew Rader Studios. (n.d.). Lysosomes - Little Enzyme Packages. Retrieved from <u>http://www.biology4kids.com/files/cell\_lysosome.html</u> -Campbell Reece. AP Edition Biology Seventh Edition

