

() Used to further modify and distribute proteins and lipids from the ER. These modified proteins are then destined to be shipped somewhere else in the cell or exported outside the cell membrane. This is the organelle that conducts most of the post-translational modifications in a eukaryotic cell.

() The control center of the cell, it regulates the activities of the cell such as growth and metabolism. Carries the genes used to encode everything that makes up the cell.

() An RNA and protein assembly that serves as the site of protein synthesis in the cell. Used to convert RNA into amino acids through a process called translation.

() Membrane envelopes that transport materials throughout the cell.

() Gel-like fluid that is the medium for most reactions in the cell. It also provides a platform upon which other organelles can exist within the cell.

() This ER lacks ribosomes and helps synthesize and concentrate various substances needed by the cell.

() This ER sits on top of the nuclear envelope and is loaded with many ribosomes to quickly make most of the proteins needed by the cell.

() Paired barrel-shaped organelle located near the nucleus. Organizes microtubules that make up parts of the cytoskeleton. Play an important role in cell division (mitosis) by using the cytoskeleton to pull chromosomes apart.