        - 1. A cytosolic protein (a protein in the cytoplasm that wants to get into the nucleus) is recognized by an importin on the nucleus.
        - 2. This complex is is transported into the nucleus, where it goes to visit a GTP-binding protein called Ran. Interaction with the Ran causes the protein to be released into the nucleus.
        - 3. The used-up Ran and GTP protein retreats back after a hydrolysis to separate the Ran and the GTP.
    - What about going out of the nucleus?
        - Export is mainly used for mRNA that functions in the cytosol.
        - RNA export is similar to the active transport described but the proteins bind to RNA instead of cargo. These proteins contain nuclear export signals (NESs), which are NLSs but for RNA. And instead of being recognized by importins, they're recognized by exportins. Lol.
- Why doesn't the nucleus collapse after the DNA has been removed during replication or something?
    - The nuclear matrix keeps the shape of the nucleus during these processes.
    - Also, the nuclear lamina is a thick network of fibers that lines the inner membrane of the inner nucleus. It's made of protein called lamins.
- The nucleolus aids in the synthesis of ribosomes.