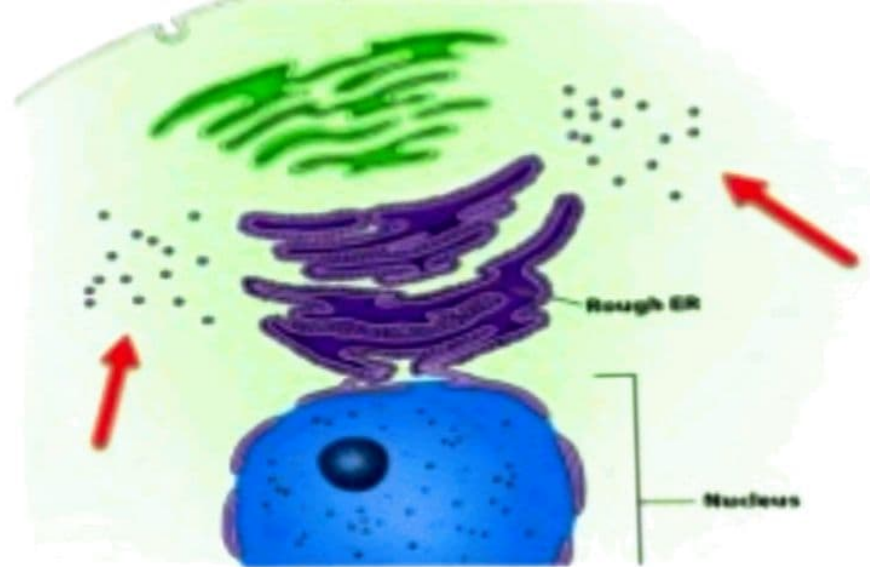


- Membrane bound
 - Synthesize proteins for membranes and exocytosis (Used outside the cell)
 - Attached to ER and other organelles

- Free Ribosomes

- Found freely in cytoplasm (Red arrows)
- Synthesize proteins that function inside the cell e.g. food metabolism

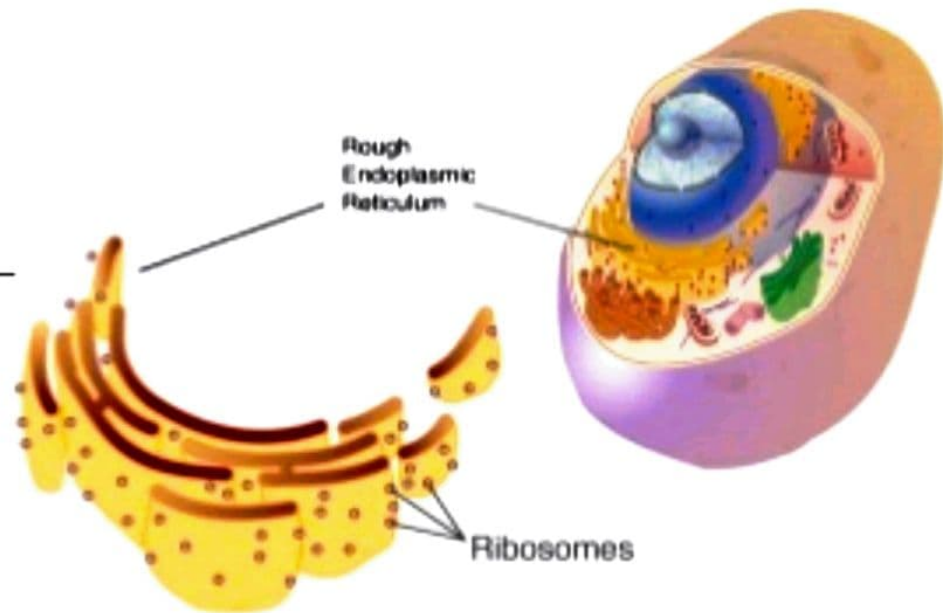


- First observed during mid 1950s by George Emil Palade
- By electron microscope as dense particles
- First named Microsomal Particles
- Its detailed structure was discovered in 2000 and 2001

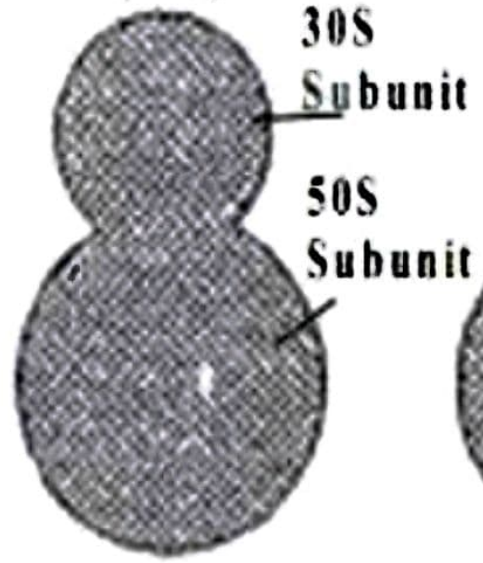


Introduction

- Cell's factory; site for protein synthesis (Translation)
- Also known as Translational Apparatus
- Non-membranous organelle
- Mostly attached to Rough ER
- Also found free
- Made up of rRNA and ribosomal proteins



**Prokaryotic
Ribosome
(70S)**



**Eukaryotic
Ribosome
(80S)**

