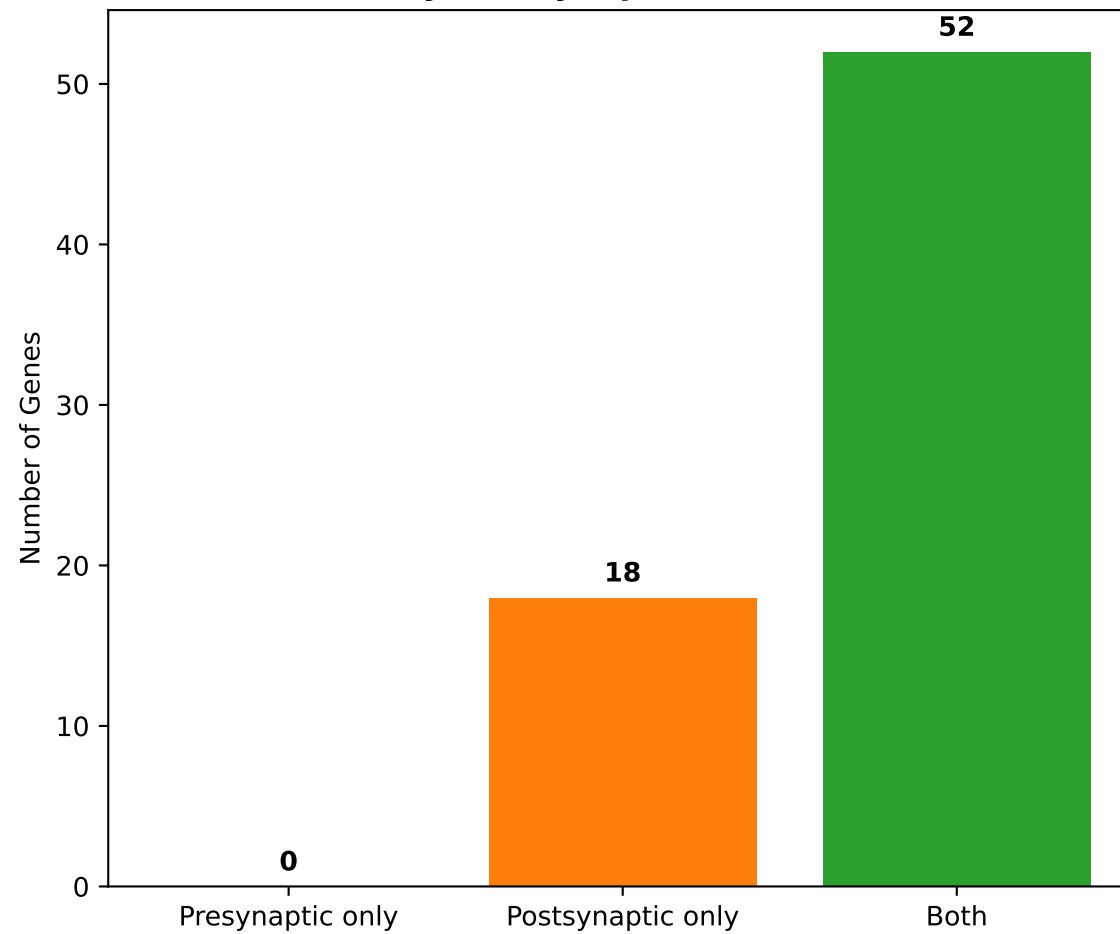
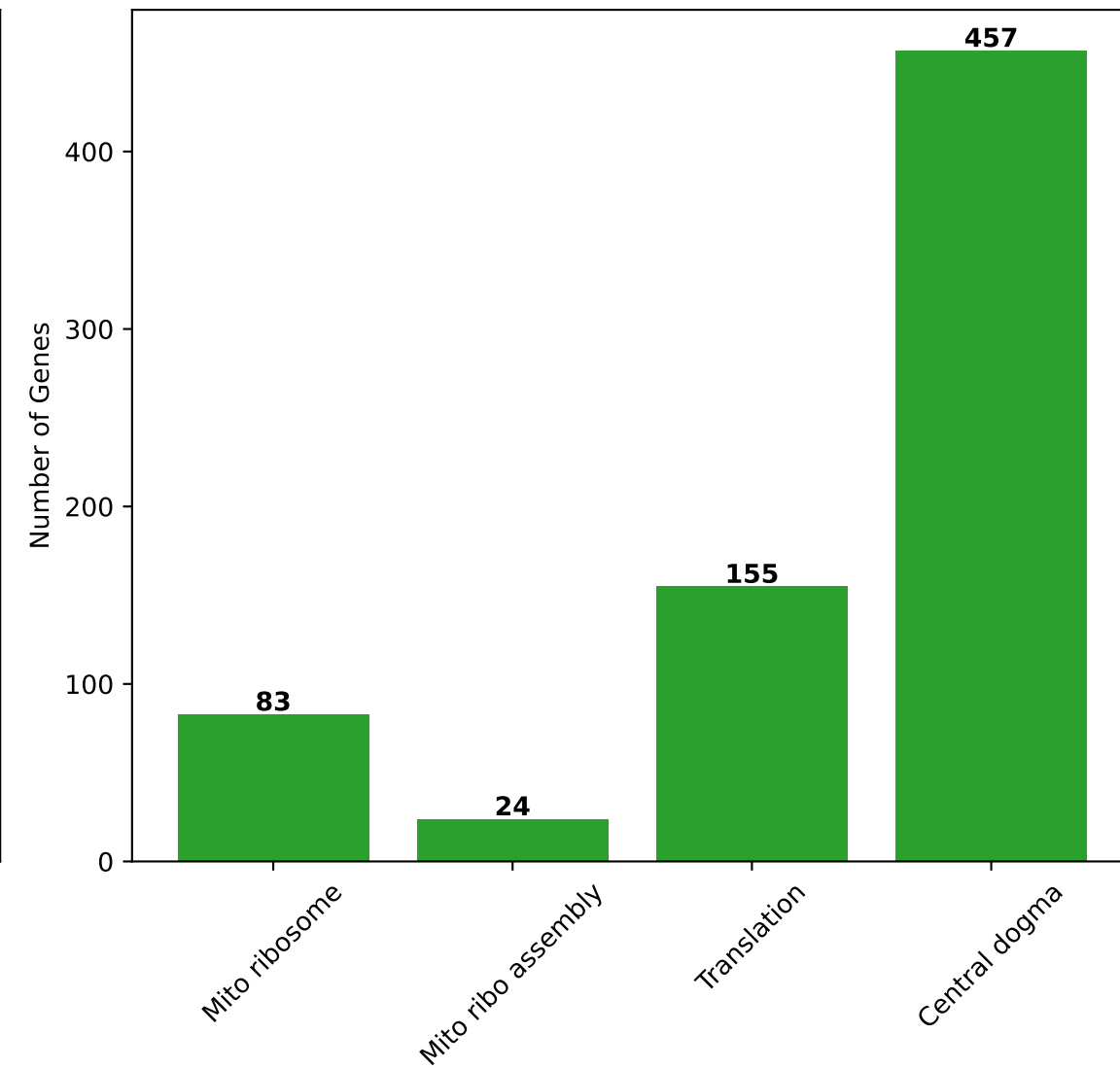


# Ribosome Gene Set Composition Across Databases

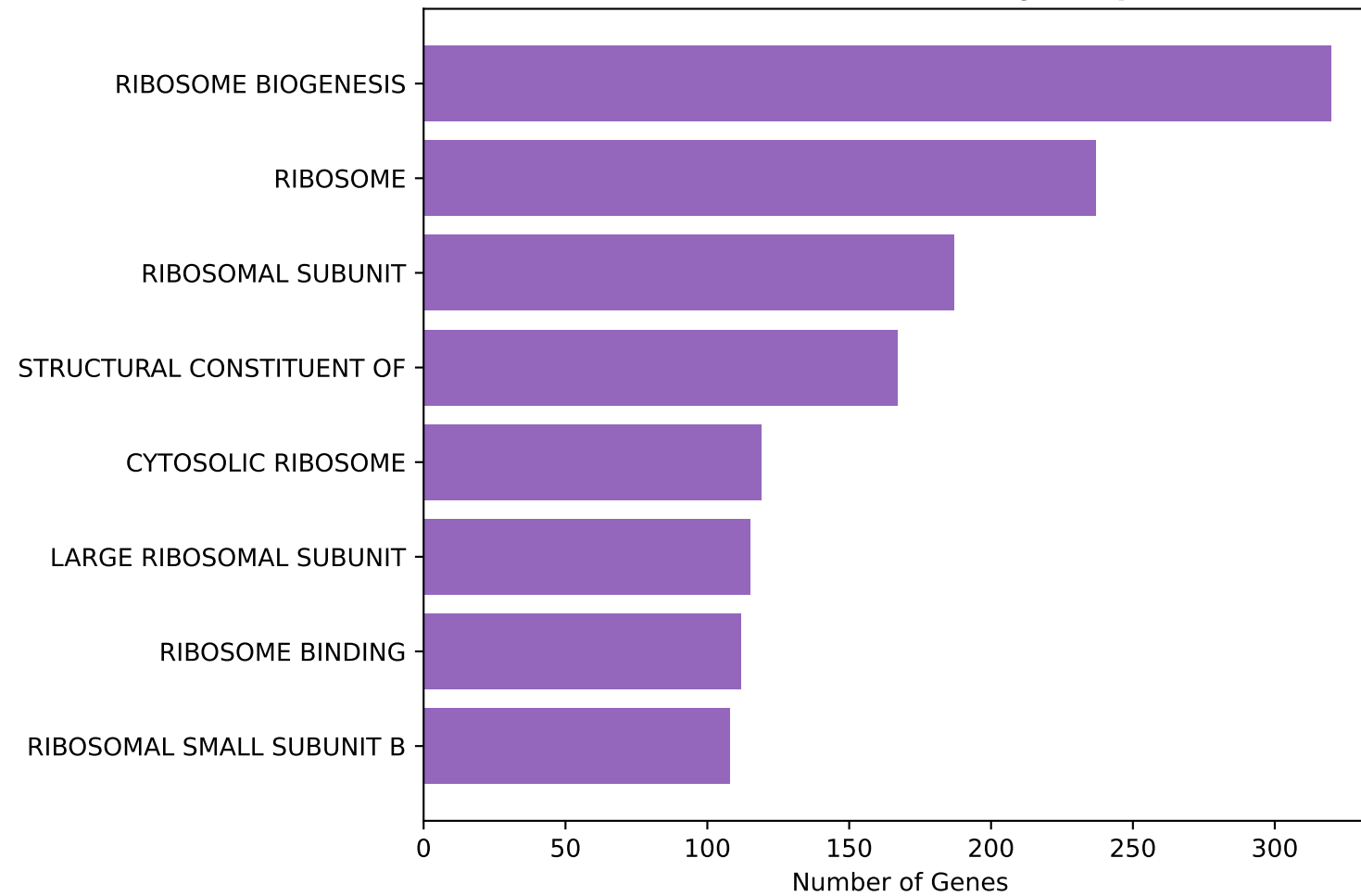
## A. SynGO Synaptic Ribosomes



## B. MitoCarta Mito-Translation



## C. GO Ribosome Pathways (Top 8)



### Gene Set Summary

#### SynGO Synaptic Ribosomes:

- Presynaptic: 52 genes
- Postsynaptic: 70 genes
- Combined unique: 70 genes

#### MitoCarta Mito-Translation:

- Combined unique: 457 genes

#### GO Ribosome Biogenesis:

- 18 pathways
- Combined unique: 587 genes

#### Overlaps:

- SynGO  $\cap$  MitoCarta: 0 genes
- SynGO  $\cap$  GO: 70 genes
- MitoCarta  $\cap$  GO: 124 genes
- All three: 0 genes

#### Interpretation:

Synaptic (SynGO) and mitochondrial (MitoCarta) ribosomes are distinct protein pools with minimal overlap, despite both being involved in protein translation.