

Antigen processing and presentation!

Antigen is produced from inside the cell as the cell is virally infected and the antigens are produced from inside the cell itself.

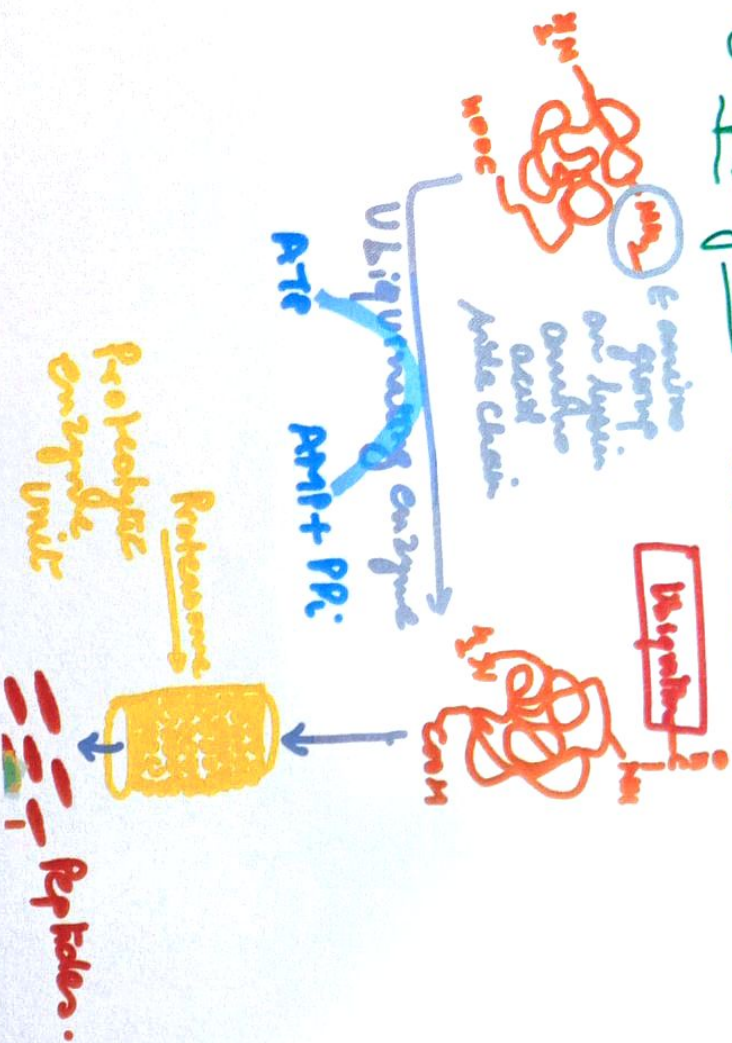
Viruses are synthesising their proteins + peptide by using the host cell machinery

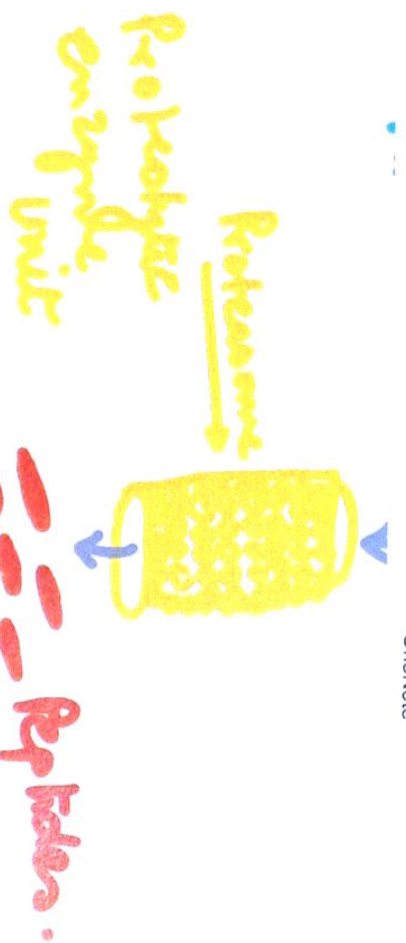
These proteins and peptides are kept accumulating in cell cytoplasm of virally infected cells.

Virally proteins → ANTIGENS → ENDO cytosolic ANTIGENS

PATHWAY

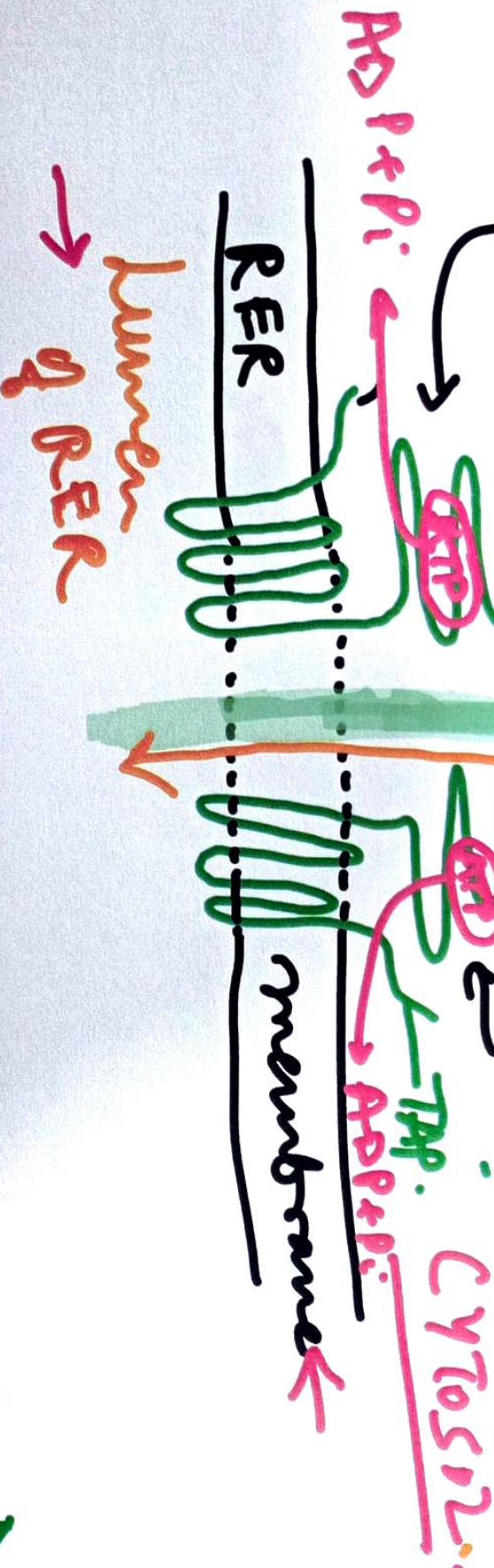
① Peptide generation by proteasome.

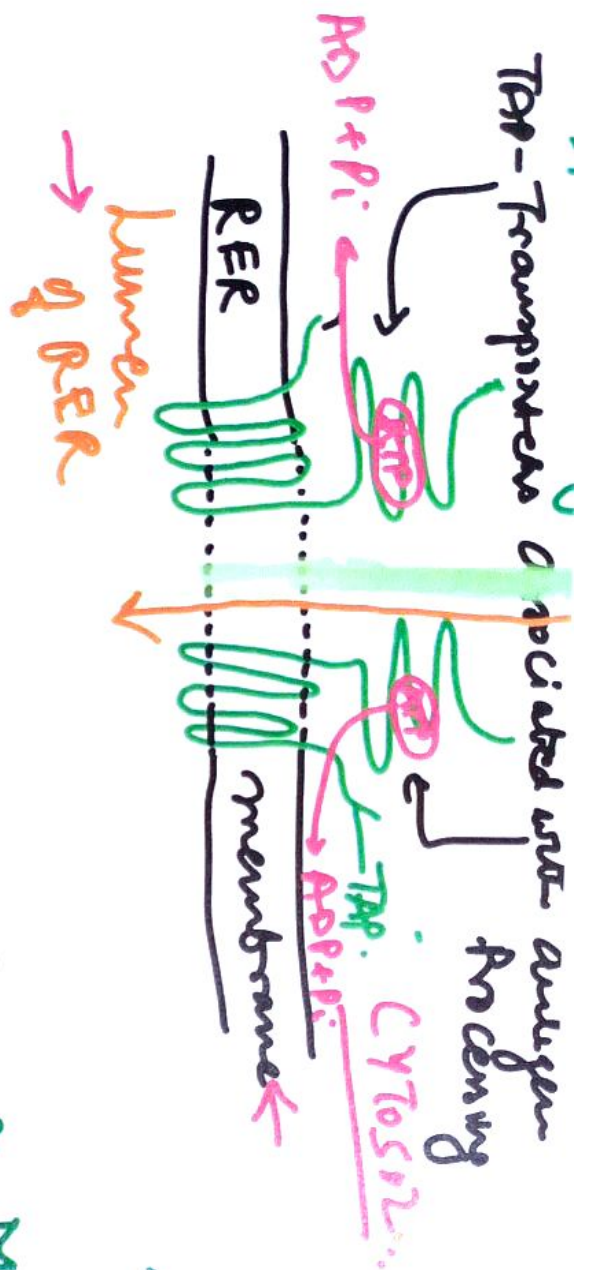




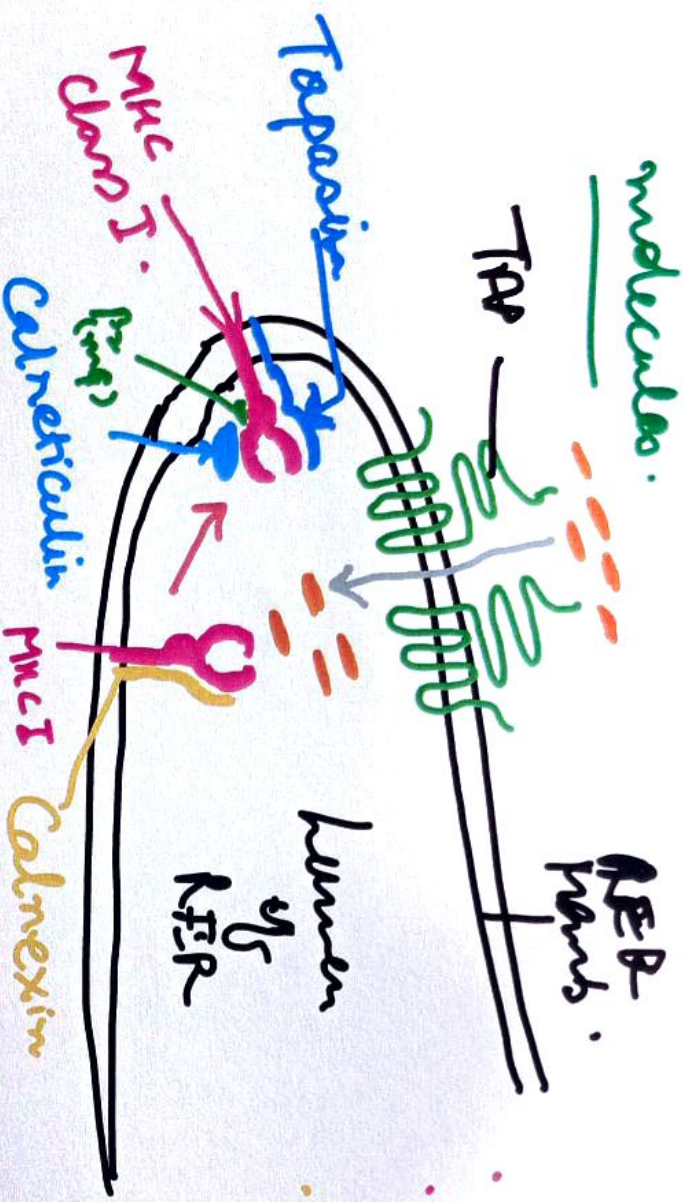
② Peptides are translocated from the cytosol to RER (Rough Endoplasmic Reticulum)

TPP-Translocators associated with antigen presenting





③ Loading of the processed peptides on MHC Class I



Molecular Chaperones → Modify the

MHC I →



Calreticulin

Protein structures within the cell after their final processing.

