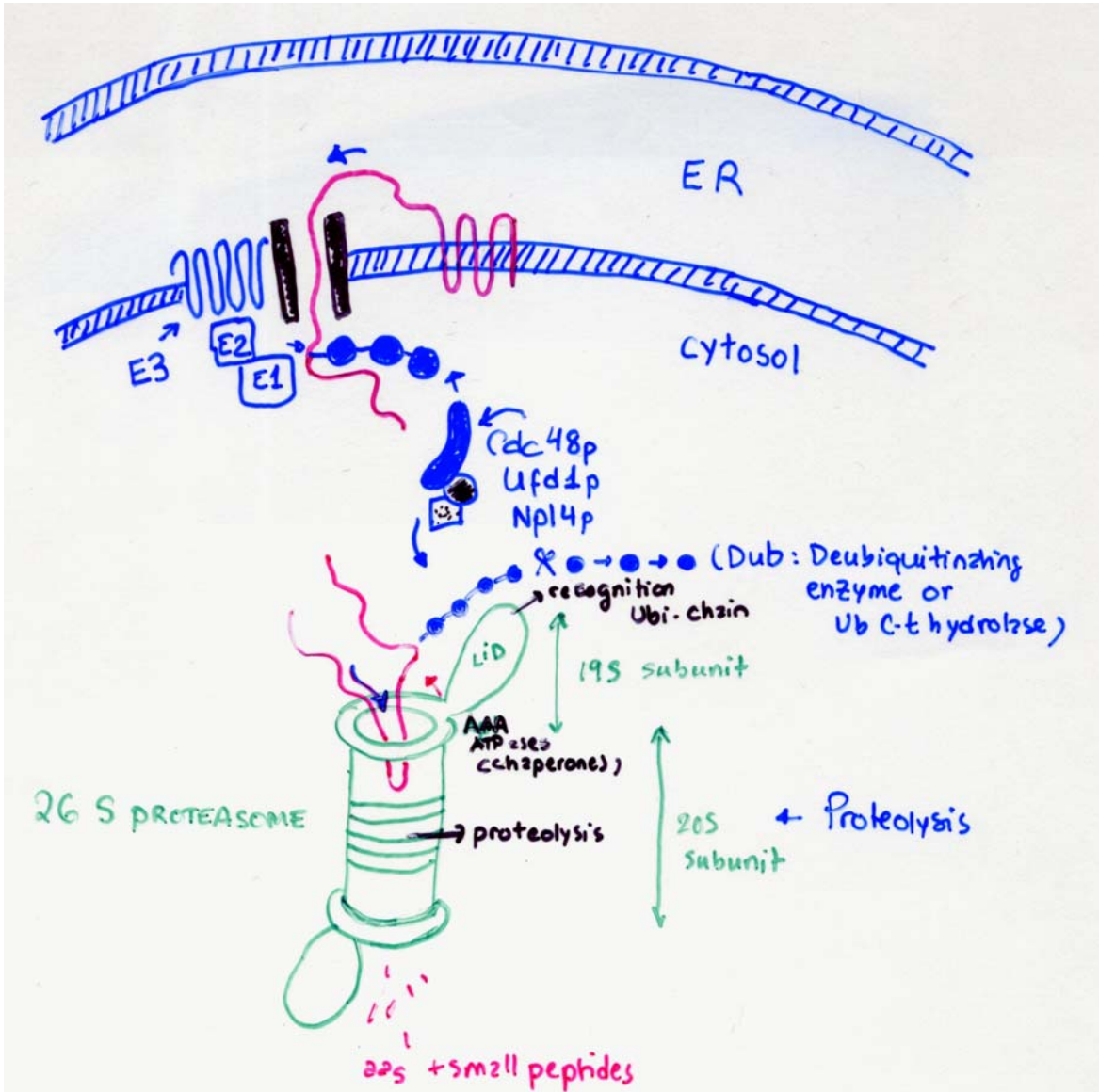


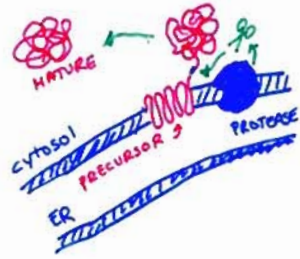
Introductory slides for
Session 3



"ERAD"

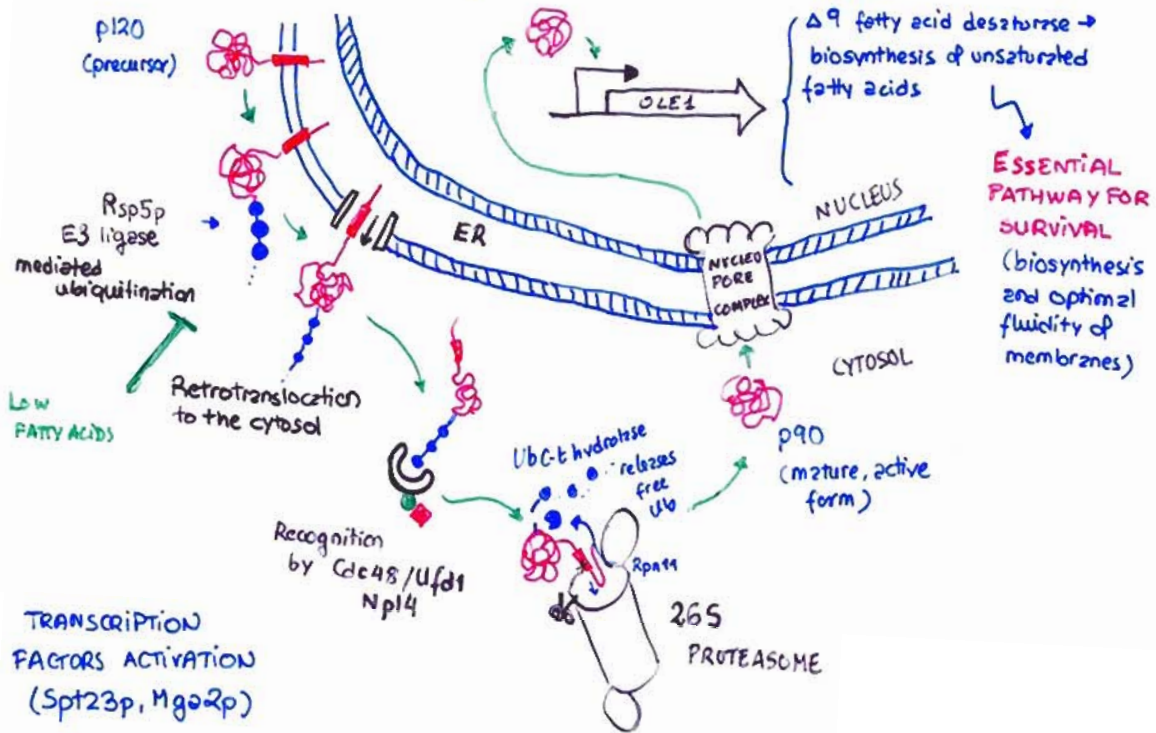
ER ASSOCIATED DEGRADATION

"Rip": REGULATED INTRAMEMBRANE PROTEOLYSIS



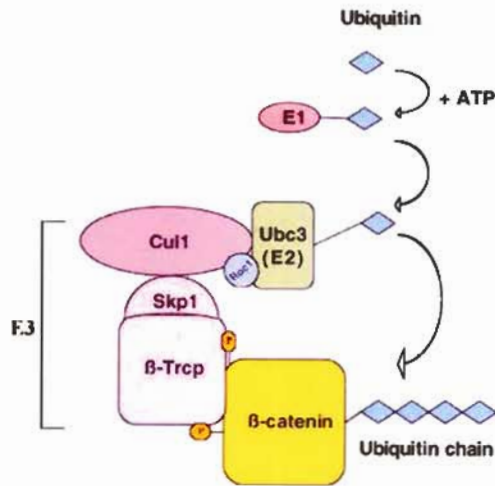
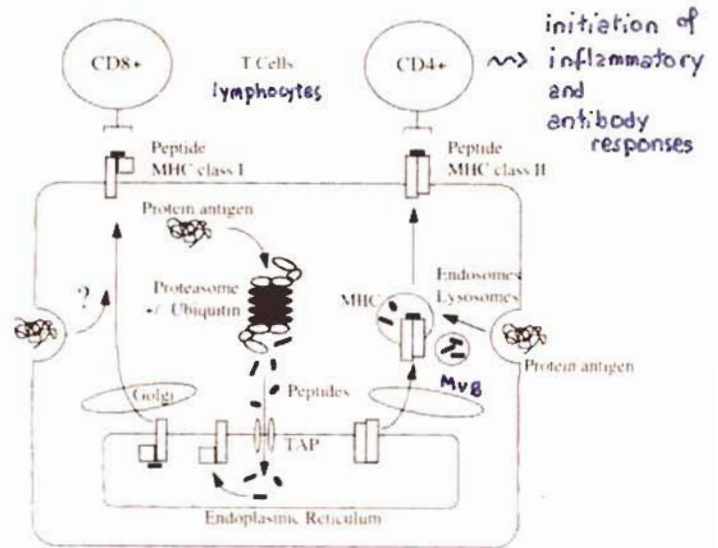
- site-specific membrane-localized proteases
- substrates activated by proteolytic processing
 - e.g. SREBP → TF controlling sterol metabolism
 - IRE1 → unfolded protein response
 - Notch
 - APP

"RUP": REGULATED UBIQUITIN/PROTEASOME-DEPENDENT PROCESSING" a type of ERAD (ER associated degradation) process involving proteolytic processing:



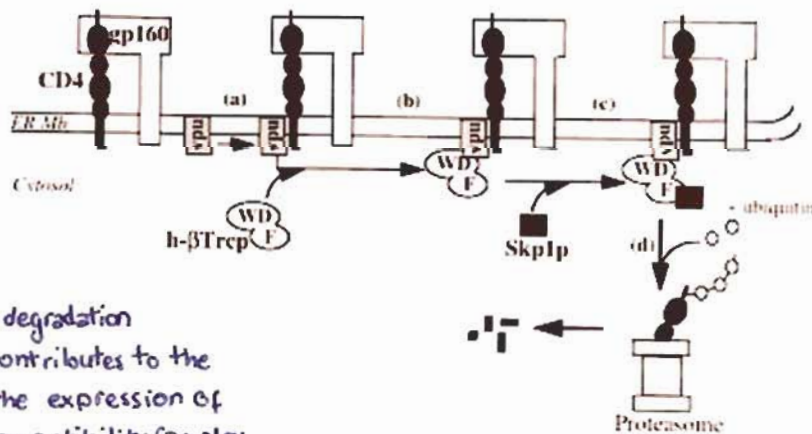
The MHC class I and class II pathways for presentation of intracellular and extracellular antigens.

CD4 is the major cellular receptor for HIV-1



- β -Trcp is a F-box protein, part of a SCF E3 ligase complex. It doesn't normally interact with CD4.

Luminal compartment



Vpu mediates degradation of CD4 and contributes to the decrease in the expression of major histocompatibility Complex (MHC) class I molecules on the surface of HIV-1 infected cells