RESETing ER proteostasis: Selective stress pathway hidden in the secretory route

Couve, Andrés

Hetz, Claudio

 The efficient folding of membrane and secreted proteins relies on the unfolded protein response (UPR) to buffer fluctuations in the load of misfolded proteins. Although the UPR is thought to operate on a generic manner to maintain ER proteostasis, a recent study revealed the existence of a novel mechanism to eliminate misfolded GPI-anchored proteins via the secretory pathway, termed 'rapid ER stress-induced export' (RESET) (Satpute-Krishnan et al,). RESET involves the export of misfolded GPI proteins to the plasma membrane for subsequent degradation by the lysosome.