

Cargo selection by the retromer coat complex: A mechanism for recycling transmembrane proteins from endosomes.

SY09-03

A. Hierro¹

¹CIC bioGUNE, Derio, Spain

Recycling prevents waste, reduces consumption and maintains balance. The ability to return receptors to their original location relies on signals and mechanisms that orchestrate their selective packing. Living cells constantly recycle receptors, proteins and lipids with a direct impact on nutrient uptake, re-sensitisation to environmental signals, immune surveillance and waste management. Endosomes are key recycling compartments where the biosynthetic and endocytic pathways intersect. Here, the fate of sorting receptors is directly linked to their selective recruitment into tubulo-vesicular carriers. Retromer is a multi-protein complex that recycles transmembrane cargo from endosomes to the trans-Golgi network and the plasma membrane. Our results will focus on how retromer complex couples membrane recruitment with cargo selection.