

Seminar

Dynamics of the earliest endosomes

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The dynamics and fate of endosomal vesicles following scission at the plasma membrane is central to understanding of transport phenomena and signal processing by living cells. Following internalization, cargo localizes in newly generated vesicles at the plasma membrane and subsequently within Rab5 positive endosomal compartments. The roles of intermediate Rab5 effectors found on the earliest endosomal vesicles - EEA1 and APPL1 is unclear. There are contradictory models regarding the chronology, function and conversions of APPL1 and EEA1 before Rab5 acquisition on endosomes. Here, using fast volumetric imaging using lattice light sheet based imaging and image analysis, we decipher the molecular precedence between EEA1, APPL1 and Rab5 and reveal the dynamic organization of the earliest endosomes.

Friday, Jan 5th 2018

04:00 PM (Tea/Coffee at 03:30 PM)

Auditorium, TIFR-H