



Distinguished Guest Lecture Series

Thursday, September 24th at 11:00

Hingsalur – Childrens hospital

Dr. Claire Mitchell

University of Pennsylvania,

Title: “Lysosomal roles in extracellular and intracellular communication”

Abstract: “The final step in the autophagic process is the degradation of macromolecules by lysosomal enzymes. Emerging data suggests the lysosomes have multiple roles in addition to being the cell’s garbage disposal. Lysosomes are a major store of intracellular calcium, and activation of the lysosomal calcium channel TRPML1 leads to the release of this calcium into the cytoplasm. Transmitters like ATP and cytokines like IL-6 are also stored in lysosomes and stimulation of certain signaling pathways leads to lysosomal exocytosis and release of the signals into the extracellular space. Defects in the autophagic degradation can disrupt both intracellular and extracellular signaling.”