

The plasticity of the autophagic pathway: making autophagosomes big and small

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Autophagy is a conserved cellular response to nutrient limitation as well as a quality control pathway that eliminates harmful or surplus material from eukaryotic cells. Mediating this response are novel double-membrane vesicles termed autophagosomes whose mechanism of formation exhibits unique characteristics and challenge our understanding of membrane rearrangements during cellular traffic. In my talk I will describe recent and older work from my group that tries to understand how autophagosomes are formed and whether their ultimate function (nutrient limitation vs quality control) as well as their size exhibit mechanistic differences.