



LIFE SCIENCES SEMINAR SERIES 2023 – 2024

The role of ATG9A in autophagy and lysosome homeostasis

Professor Sharon A. Tooze

The Francis Crick Institute
United Kingdom



Brief biography

Sharon Tooze studied for her PhD in molecular cell biology at the European Molecular Biology Laboratory (EMBL) in Heidelberg, Germany. At EMBL she studied transport of the MHV-SARS viral glycoprotein and showed that initiation of O-linked glycosylation, and the N-acetyl-galactosamine enzyme, is in the ER-Golgi intermediate compartment. Her post-doctoral work at EMBL addressed her interest in organelle biogenesis in neuroendocrine cells. During this post-doc Tooze demonstrated nascent neuroendocrine secretory granules are formed at the trans-Golgi network in a pathway parallel to bulk secretion.

Tooze maintained her interest in the biogenesis of secretory granules when she moved to the Imperial Cancer Research Fund, later the Cancer Research UK London Research Institute (and now part of the Francis Crick Institute). In she 2006 developed her research program in autophagy and the biogenesis of autophagosomes.

Since 2006, her lab has investigated the function of key mammalian autophagy proteins and continuing to contribute to the current understanding of autophagy at the molecular cell biology level, and increasingly focused on biochemistry and structural approaches. Her current work on the early stages of autophagosome formation have elucidated mechanisms involved in membrane expansion, composition, and recruitment of the ATG8 protein family.

Her work is funded by the Francis Crick Institute, and an ERC advanced grant. Sharon Tooze is an EMBO member, a Fellow of the Academy of Medical Sciences, and Fellow of the European Academy of Sciences.

Date:
Feb 22, Thursday

Time:
3:00pm – 4:00pm

Venue:
L1, Science Centre

ALL ARE WELCOME