

Sharon A. Tooze
The Francis Crick Institute

Short Biography

Sharon Tooze is currently a Senior group leader at the Francis Crick Institute in London, UK. Sharon is an EMBO member, editor of the *Traffic* and a member of a number of editorial boards of scientific journals, and participates in review panels and grant agencies in Europe and the UK. Sharon has organized a number of conferences including Gordon Conference, Keystone Meetings and EMBO workshops in Europe. Sharon completed her PhD and post-doctoral work at EMBL, Heidelberg in the Cell Biology Programme. Sharon then became a group leader at ICRF, London, later called the London Research Institute, Cancer Research UK, London, and now the Francis Crick Institute.

Sharon's training in cell biology was the foundation for her career-long interest in organelle biogenesis, first applied to neuroendocrine dense core secretory granules, followed by her research into autophagosome formation and autophagy. Her expertise is in protein trafficking, including subcellular fractionation, in vitro reconstitution, protein targeting, and structure-function analysis of proteins. Since 2004, Sharon's lab has been focused on understanding how autophagy occurs in mammalian cells. Her laboratory identified some of the key mammalian proteins, ULK1, ATG9 and WIPI2, and now studies these proteins to gain an understanding of their function in autophagy. In addition, her laboratory has carried out genome-wide and targeted screens to identify new regulatory proteins as well as to uncover trafficking pathways involved in autophagy. Sharon's most recent new work aims to understand the role of autophagy in pancreatic cancer.