

Special Issue

Autophagy in Antimicrobial Immunity

Message from the Guest Editor

Paradigm-shifting discoveries in the last fifteen years revealed that autophagy plays a major role in the immune system, adding to its well-known function in cellular homeostasis. Connections between autophagy defects and major disease phenotypes have spurred interest in the autophagy machinery as potential therapeutic target. In the area of infectious diseases, autophagy modulation is now being explored as a novel approach to treat antibiotic-resistant infections. Autophagy has multiple functions in host defence: it targets intracellular microbes towards lysosomal degradation, helps restricting microbes in subcellular compartments, facilitates antimicrobial peptide delivery to these compartments, controls inflammation, and processes peptides for antigen presentation. There is strong evidence for the host defence function of different autophagy-mediated processes, including xenophagy and LC3-associated phagocytosis, but in turn pathogens have evolved virulence mechanisms to evade autophagy or even exploit autophagic compartments as a replication niche.

Guest Editor

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Cells has become a solid international scientific journal that is now indexed on SCIE and in other databases. We have successfully introduced a special issues format so that these issues serve as mini-forums in specific areas of cell science. *Cells* encourages researchers to suggest new special issues, serve as special issues editors, and volunteer to be reviewers. Our main focus will remain on cell anatomy and physiology, the structure and function of organelles, cell adhesion and motility, and the regulation of intracellular signaling, growth, differentiation, and aging. We are open to both original research papers and reviews.

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