

Special Issue

Autophagy and RNA: Functional and Molecular Interplay in Health and Disease

Message from the Guest Editors

The evolutionarily conserved process of autophagy serves to eliminate and recycle superfluous or damaged cellular components, with crucial importance for cellular physiology in health, infection and disease. Beyond its traditionally studied roles in maintaining protein, lipid and organelle homeostasis, increasing evidence indicates that autophagy can impact RNA homeostasis. Autophagy can degrade RNA, RNA-binding proteins (RBPs) and ribonucleoprotein (RNP) complexes and beyond its degradative capabilities, core autophagy players can additionally contribute to intracellular transport or extracellular release of RNA and related complexes. Autophagy itself is also regulated by RNAs and RBPs. During stress, when autophagy is enhanced, mRNA stability and translation is profoundly modulated and this allows selective processing and/or translation of key autophagy-related transcripts as part of these responses. **Keywords:**

- RNA
- Autophagy
- Translation regulation
- Gene expression

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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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