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## Autophagy and AMPK/mTOR Signaling Regulate Stress Responses, Metabolism, and Immunity

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Deadline for manuscript submissions:

**closed (20 November 2022)**

### Message from the Guest Editors

Autophagy is upregulated in response to diverse types of stressful stimuli, functioning as a cell survival mechanism that removes damaged proteins/organelles and provides new building blocks and energy sources during metabolic, hypoxic, oxidative, proteotoxic, and drug-induced stress. In addition to regulating cellular metabolism and stress responses in both normal and cancer cells, autophagy shapes immunity through pathogen clearance, modulation of cytokine production, antigen presentation, and lymphocyte selection, homeostasis, and survival. The main intracellular signals for autophagy induction are the activation of the energy sensor AMP-activated protein kinase (AMPK) and subsequent inhibition of the mechanistic target of rapamycin (mTOR), the major repressor of catabolic processes, including autophagy. This Special Issue welcomes submissions on autophagy and AMPK/mTOR signaling in regulation of stress responses, metabolism, and immune cell function, with the purpose of outlining their roles and interaction in cellular and organismal homeostatic functions as well as in diverse pathologic settings, including metabolic and immune-system-related diseases.



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**Special** Issue



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