

Oxidative Medicine and Cellular Longevity

Special Issue on Mechanisms of Cellular Rejuvenation

Aging is a complex process that produces a progressive decline of organs' function affecting all living organisms. Although the aging rate is different among species, it always leads to an increase in disease susceptibility and health decline. Indeed, aging study has grown in the last years. Aging represents a well-known independent risk factor for most chronic nontransmissible diseases, including cancer, cardiometabolic, respiratory, and neurological diseases.

Cellular rejuvenation, which is defined as the reversion of an aged phenotype at cell level, is the greatest challenges in modern medicine for the treatment of agingrelated diseases. The knowledge and understanding of the mechanisms of cellular rejuvenation will lead to the identification of novel research tools and development of innovative pharmacological therapies to improve the quality of life of aged population.

We encourage investigators of different disciplines to contribute original research articles as well as review articles that will stimulate the continuing efforts to understand the molecular mechanisms of aging and cellular rejuvenation. We are interested in articles that explore all aspects of the mechanisms of rejuvenation in cellular and animal models.

Potential topics include, but are not limited to:

- Proteostasis
- Mitochondrial dynamics
- Cell bioenergetics
- ▶ Unfolded protein response (UPR) and mitochondrial UPR (mtUPR)
- Autophagy
- ▶ Cellular senescence
- ▶ Genomic instability
- ► Determinants of stem cells fate
- Rejuvenation and tissue regeneration
- Antioxidant cellular defense
- ▶ Rejuvenation factors and small molecules
- Rejuvenation signaling pathways
- Dietary supplement

Authors can submit their manuscripts via the Manuscript Tracking System at http://mts.hindawi.com/submit/journals/omcl/mcr/.

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