

Special Issue

Mitochondrial Metabolic Reprogramming and Nuclear Crosstalk in Cancer

Message from the Guest Editor

Though aerobic glycolysis is an established phenomenon in cancer cells, recent developments in cancer metabolism suggest that most tumor mitochondria are not completely dysfunctional, but reprogram to have their ability to carry out oxidative phosphorylation (OXPHOS). Recently, increasing experimental evidence shows a critical role of OXPHOS in tumorigenesis and metastasis.

Extensive crosstalk between the mitochondria and the nucleus known as mitochondrial retrograde regulation (MRR), also influences many tumor and cellular activities. Importantly, several proto-oncogenes and tumor suppressors are actively involved in the regulation of metabolism. Recently, metabolically targeting of cancer cells is gaining increasing attention in oncology. Considering the heterogeneity of tumors, characterizing mitochondrial reprogramming and MRR in cancer subtypes is critical in understanding the mechanism of tumour initiation, progression and therapeutic resistance. It can also support the development of newer agents to metabolically target cancer subtypes and the repurposing of existing metabolic drugs for cancer therapy.

Guest Editor

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Deadline for manuscript submissions

closed (30 June 2019)



Cells

an Open Access Journal
by MDPI

Impact Factor 5.2
CiteScore 10.5
Indexed in PubMed



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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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