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Mitochondria as a Core of Cell Signals

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Message from the Guest Editor

Dear Colleagues,

Mitochondria are highly dynamic organelles that serve as a metabolic core wherein catabolic pathways converge upon fuel cells and building blocks for the synthesis of essential cell components. Reactive oxygen species and lipid peroxidation products function as powerful signalling molecules. Cytochrome c and other proapoptotic factors can activate cell death. Mitochondrial DNA mediates inflammatory responses. Further, tricarboxylic acid cycle metabolites released from mitochondria play a broad variety of nonmetabolic roles.

In this collection, we will present an updated view of the role of mitochondria as a core for signalling routes involved in distinct pathological processes including cancer, neurodegenerative syndromes, and diseases. How accumulated knowledge on these processes is aiding the creation of novel therapeutic approaches will be also discussed.

Specialsue

Dr. Antonio Díaz-Quintana *Guest Editor*



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