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Abstract

## Keeping mitochondria in shape: a matter of cell life and death<sup>†</sup>

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**Abstract:** In the last years, mitochondrial ultrastructural and morphological changes have been implied in the control of several physiological and pathological changes, including the progression of apoptosis, inflammation, differentiation, tumorigenesis. However, the role of mitochondrial dynamics in the control of complex cellular cues and in response to reversible and irreversible cellular damage is not yet clarified. We will overview the key experiments that shed light on the role of mitochondrial shape and ultrastructure in cell physiology, pathology and in disease and offer a personal perspective on the missing pieces of the puzzle that await to be studied.

Keywords: Mitochondria, Cells, Organelle Function



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