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Title:	Mitochondrial Control of Stem Cell State and Fate: Lessons From Drosophila
Authors:	Tiwari, Satish Kumar (/jspui/browse?type=author&value=Tiwari%2C+Satish+Kumar) Mandal, Sudip (/jspui/browse?type=author&value=Mandal%2C+Sudip)
Keywords:	Mitochondrial Stem Cell State and Fate Drosophila
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Citation:	Frontiers in Cell and Developmental Biology, 9.
Abstract:	Over the years, Drosophila has served as a wonderful genetically tractable model system to unravel various facets of tissue-resident stem cells in their microenvironment. Studies in different stem and progenitor cell types of Drosophila have led to the discovery of cell-intrinsic and extrinsic factors crucial for stem cell state and fate. Though initially touted as the ATP generating machines for carrying various cellular processes, it is now increasingly becoming clear that mitochondrial processes alone can override the cellular program of stem cells. The last few years have witnessed a surge in our understanding of mitochondria's contribution to governing different stem cell properties in their subtissular niches in Drosophila. Through this review, we intend to sum up and highlight the outcome of these in vivo studies that implicate mitochondria as a central regulator of stem cell fate decisions; to find the commonalities and uniqueness associated with these regulatory mechanisms.
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