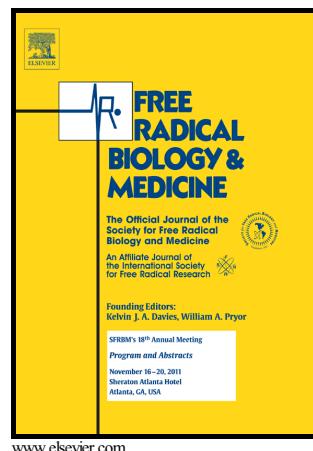


# Author's Accepted Manuscript

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inducing mitochondrial ROS production

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## ACCEPTED MANUSCRIPT

Heme modulates *Trypanosoma cruzi* bioenergetics inducing mitochondrial ROS production

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### ABSTRACT

*Trypanosoma cruzi* is the causative agent of Chagas disease and has a single mitochondrion, an organelle responsible for ATP production and the main site for the formation of reactive oxygen species (ROS). *T. cruzi* is an obligate intracellular parasite with a complex life cycle that alternates between vertebrate and invertebrate hosts, therefore the development of survival strategies and morphogenetic adaptations to deal with the various environments is mandatory. Over the years our group has been studying the vector-parasite interactions using heme as a physiological oxidant molecule that triggered epimastigote proliferation however, the source of ROS induced by heme remained unknown. In the present study we demonstrate the involvement of

<sup>1</sup> These authors contributed equally to this work.

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