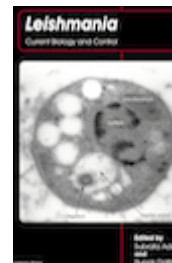


# Leishmania

## Current Biology and Control

Edited by: **Subrata Adak and Rupak Datta**

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With an estimated 1.3 million new cases and causing more than 20,000 deaths every year, *Leishmaniasis* continues to be a menace in countries across the globe. The absence of an anti-*Leishmania* vaccine, the toxicity of current anti-parasite drugs, coupled with the rapid emergence of drug resistant *Leishmania* strains remain significant challenges for disease control. This has spurred a plethora of research initiatives into the parasite biology, parasite-host interaction, mechanisms of disease pathogenesis, drug development and molecular mechanism of drug resistance. Insights obtained from various such studies are essential for the development of novel anti-*Leishmania* treatment strategies.

In this timely book respected *Leishmania* experts distil the important current research highlighting the most insightful discoveries in the field. Topics covered include: modulation of host miRNA; heat shock proteins; Iron in the *Leishmania*-macrophage interaction; oxidative and nitrosative stress response; cell death; strategies for immune evasion; STAT signalling; parasite modulation of toll-like receptors in macrophages; T cells in *Leishmania* infection; vaccine biology; inhibitors of *Leishmania* DNA topoisomerases; and mechanism of drug resistance in visceral *Leishmaniasis*.

An essential text for everyone in the *Leishmania* community and recommended for researchers working in related fields.

**Chapter 1.** Modulation of Host Cell miRNA Expression During *Leishmania* Infection and Emergence of miRNA as a New Therapeutic Molecule. *Suvendra N. Bhattacharyya, June Ghosh and Sudarshana Basu*

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