

EDITORIAL

Trypanosomatidae Family: Biochemical Features

This special issue “Trypanosomatidae Family: Biochemical Features” comprises eighteen minireviews written by sixty-four authors. The reviews highlight the current state of a variety of research topics on trypanosomatids, including their cell biology, ultrastructure, biochemistry, proteomics and genomics, as well as biochemical and immunological aspects of the interactions of the parasites with both their mammalian and insect hosts.

Chagas disease is caused by the protozoan parasite *Trypanosoma cruzi*. The pathophysiology and the mechanism of transmission of the disease were described in 1909 by the Brazilian scientist Carlos Chagas. Studies of Chagas disease in its various aspects, from basic to applied science, have revolutionized Brazilian science in an unprecedented way. Even today, roughly 1 in every 3 articles published on Chagas disease reports research done in Brazil. Therefore, we chose to focus this special issue upon basic research mostly on Chagas disease and leishmaniasis, two endemic diseases of high prevalence in Latin America.

The reviews were written mostly by Brazilian scientists, thus providing a broad view of current Brazilian contributions in this field, and its insertion among worldwide research on the topic. For this reason, there are no specific articles on African trypanosomas, albeit the subject is briefly addressed in the introductory article.

This special issue is dedicated to Carlos Chagas and to all the great scientists from all countries whose efforts are directed at finding ways to eradicate the devastating diseases caused by trypanosomatids. It is also dedicated to the bright investigators who brought to light several important aspects of Biology, first discovered in these protozoa, and later extended to higher eukaryotes. Examples of such include *trans*-splicing of nuclear RNAs, glycosylphosphatidylinositol (GPI)-anchored membrane proteins and RNA editing.

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