BioMed Research International

Special Issue on

Control of Vector-Borne Human Parasitic Diseases

CALL FOR PAPERS

Neglected Tropical Diseases transmitted by vectors are responsible for over 1 billion cases and 1 million deaths every year, corresponding to at least 17% of all infectious diseases. Among them are malaria, leishmaniasis, onchocerciasis, lymphatic filariasis, Chagas disease, and African trypanosomiasis.

Historically, vector control has been the main strategy for prevention of disease outbreaks. This has been done mainly by the use of chemical insecticides. However, over the past decades, this strategy has not been successful regarding reduction of morbidity and mortality. Moreover, this practice has resulted in the emergence of insecticide-resistant vector populations, which constitute a topic of major concern for most health agencies across the world. Because of that, new strategies, tools, and targets for vector control have been the focus of research in recent years.

Over the past decades, entomology has undergone an intense renewal by the advent of genomic and postgenomic tools, and studies on vector control are not an exception. It should be emphasized that successful entomological and disease control strategies rely on deep knowledge of insect physiology and understanding of pathogen-vector interactions.

This special issue aims to discuss and present recent advances (last 15 years) in studies on vector control. We would like to request original articles as well as reviews focusing on new theoretical or technological developments and breakthroughs in the main vector-borne human tropical diseases.

Potential topics include, but are not limited to:

- Population genetics of disease vectors
- Biochemistry and molecular biology of pathogens and vectors
- Developmental and behavioral studies of disease vectors
- Novel approaches for vector control and for blocking disease transmission
- Novel tools for monitoring vector populations and insecticide resistance
- Studies on the determinants of vectorial competence and prevalence of infections in the field
- Microbiological or metagenomic analyses of microbiomes associated with vectors
- Novel tools and strategies for mass rearing of vectors
- Vaccines
- Drug resistance of parasites
- Mathematical modelling and design of control strategies

Authors can submit their manuscripts via the Manuscript Tracking System at http://mts.hindawi.com/submit/journals/bmri/parasitology/cvpd/.

Lead Guest Editor
Fernando A. Genta, FIOCRUZ, Rio de Janeiro, Brazil
genta@ioc.fiocruz.br

Guest Editors
Hector M. Diaz-Albiter, Universidad Autónoma del Estado de México, Toluca, Mexico
hectormdma@yahoo.com

Patricia Salgueiro, Instituto de Higiene e Medicina Tropical, Lisboa, Portugal
psalgueiro@ihmt.unl.pt

Bruno Gomes, Liverpool School of Tropical Medicine, Liverpool, UK
bruno.gomesdasilva@lstmed.ac.uk

Manuscript Due
Friday, 19 February 2016

First Round of Reviews
Friday, 13 May 2016

Publication Date
Friday, 8 July 2016