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Tick Biology and Microorganism Interaction: Understanding the Groundwork of Pathogen Transmission Mechanisms

Guest Editors:

Dr. Rika Umemiya-Shirafuji

National Research Center for Protozoan Diseases, Obihiro University of Agriculture and Veterinary Medicine, Obihiro, Japan

Dr. Remil L. Galay

Department of Veterinary Paraclinical Sciences, College of Veterinary Medicine, University of the Philippines Los Baños, Los Baños, Philippines

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Message from the Guest Editors

Ticks are responsible for transmitting numerous pathogens that can cause severe and potentially fatal diseases to humans and animals. Zoonotic tick-borne diseases have continued to emerge over the years. Ticks could be small, but their biology is also intricate, making them efficient vectors of pathogens. They have unique reproductive and survival mechanisms that allow them to persist, also favoring the proliferation and transmission of pathogens. Thus, a deeper understanding of their biological mechanisms is crucial to develop new strategies for effectively controlling them and their pathogens.

Through the years, several aspects of tick biology have been elucidated. Moreover, the relationship of ticks with different microorganisms, such as the essential role that symbiotic bacteria play in the survival and development of ticks and the significance of tick biomolecules in pathogen multiplication and transmission, is now recognized. This Special Issue aims to showcase the recent research developments on different aspects of tick biology and their interaction with microorganisms, including the pathogens they transmit.









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Editor-in-Chief

Dr. Nico Jehmlich

Department of Molecular Systems Biology, UFZ-Helmholtz Centre for Environmental Research, 04318 Leipzig, Germany

Message from the Editor-in-Chief

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Microorganisms Editorial Office MDPI, St. Alban-Anlage 66 4052 Basel, Switzerland Tel: +41 61 683 77 34 www.mdpi.com mdpi.com/journal/microorganisms microorganisms@mdpi.com X@Micro_MDPI