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# **Coevolution of Hosts and their Microbiome**

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Deadline for manuscript

submissions: closed (31 May 2018)

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### Message from the Guest Editors

The evolution of life-history traits in plants and animals has taken place in the midst of complex microbial communities. Biology is undergoing a fundamental reshaping where the phenotypic expression of individuals needs to be considered as the combined expression of the host and its associated microbial genomes, defined as the "holobiont" (i.e., the host and its microbiota). These concepts have wide ranging implications and have led to the realization that multicellular organisms coevolve with their microbial symbionts. Although host-microbe interactions can be understood by ecological processes, much less is known about the significance of evolutionary and eco-evolutionary processes. Given its complex structure, understanding the specific roles, adaptability, and functions provided by the microbiome is a new scientific frontier. This Special Issue will reflect recent developments in molecular and statistical techniques to discuss theoretical concepts and empirical evidences on the role of the microbiota in holobiont evolution.









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### **Editor-in-Chief**

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### Message from the Editor-in-Chief

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