Special Issue

Intestinal Homeostasis and Disease Dysbiosis

Message from the Guest Editor

Intestinal homeostasis represents the dynamic equilibrium between the gut microbiota, the intestinal epithelial barrier, the immune system, and host-derived factors, all of which collectively sustain gastrointestinal health and function. This Special Issue delves into the latest scientific advances that elucidate how this balance is maintained and the mechanisms through which it is disrupted, leading to disease.

The disruption of this equilibrium, a condition termed dysbiosis, the cutting-edge studies featured in this Special Issue investigate the ecological origins of dysbiosis, its clinical correlates, and promising therapeutic interventions.

Furthermore, this collection highlights the growing importance of microbiota–drug interactions, examining how gut microbes influence drug metabolism, efficacy, and toxicity. By dissecting the molecular, metabolic, and immunological frameworks that distinguish a healthy (eubiotic) from a dysbiotic state, the contributions in this Special Issue pave the way for innovative strategies in diagnosis, personalized therapy, and disease prevention.

Guest Editor

Dr. Nikolas Dovrolis
Department of Medicine, Democritus University of Thrace,
Alexandroupolis, Greece

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Biomedicines
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
biomedicines@mdpi.com

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Biomedicines (ISSN 2227-9059) is an open access iournal devoted to all aspects of research on human health and disease, the discovery and characterization of new therapeutic targets, therapeutic strategies, and research of naturally driven biomedicines, pharmaceuticals, and biopharmaceutical products. Topics include pathogenesis mechanisms of diseases, translational medical research, biomaterial in biomedical research, natural bioactive molecules, biologics, vaccines, gene therapies, cell-based therapies, targeted specific antibodies, recombinant therapeutic proteins, nanobiotechnology driven products, targeted therapy, bioimaging, biosensors, biomarkers, and biosimilars. The journal is open for publication of studies conducted at the basic science and preclinical research levels. We invite you to consider submitting your work to Biomedicines, be it original research, review articles, or developing Special Issues of current key topics.

Editor-in-Chief

Prof. Dr. Felipe Fregni

- Neuromodulation Center and Center for Clinical Research Learning, Spaulding Rehabilitation Hospital and Massachusetts General Hospital, Harvard Medical School, Boston, MA 02114, USA
- 2. Department of Epidemiology, Harvard T.H. Chan School of Public Health, Boston, MA 02115, USA

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