



Pharmacomicrobiomics in Non-communicable Disease

Guest Editor:

Dr. Amedeo Amedei

Department of Experimental and
Clinical Medicine, University of
Florence, Florence, Italy

Deadline for manuscript
submissions:

closed (31 January 2022)

Message from the Guest Editor

Dear Colleagues,

Pharmacomicrobiomics is a new branch that deals with investigating the interactions between the microbiome and the response to xenobiotics, defined as the effect of changes in the microbiome on drug action and toxicity. Noncommunicable diseases (NCDs) are the result of a combination of genetic, physiological, environmental and behavioral factors.

Recent data have shown that one in four drugs that we routinely take to treat nonintestinal diseases alter the gut microbiome, causing adverse events, with an increase in bacterial resistance. This complexity means that pharmacological studies require a molecular biology approach studying cell signaling and the complex host–microbe–drug interactions. Consequently, investigating the concept of pharmacomicrobiotics is important for understanding how the microbiota is involved in drug responses.

Hence, the purpose of this Special Issue is to provide an overview of the relationship between pharmacomicrobiomics and NCDs in order to better understand the molecular mechanisms and how this new branch could lead to a new therapeutic approach.

Prof. Dr. Amedeo Amedei

Guest Editor





an Open Access Journal by MDPI

Editor-in-Chief

Prof. Dr. Felipe Fregni

1. 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

Message from the Editor-in-Chief

Biomedicines (ISSN 2227-9059) is an open access journal 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.

Author Benefits

Open Access: free for readers, with article processing charges (APC) paid by authors or their institutions.

High Visibility: indexed within *Scopus*, *SCIE (Web of Science)*, *PubMed*, *PMC*, *CAPLus / SciFinder*, and other databases.

Journal Rank: JCR - Q1 (Pharmacology and Pharmacy) / CiteScore - Q2 (Medicine (miscellaneous))

Contact Us

Biomedicines Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland

Tel: +41 61 683 77 34
www.mdpi.com

mdpi.com/journal/biomedicines
biomedicines@mdpi.com
[X@Biomed_MDPI](https://twitter.com/Biomed_MDPI)