

Special Issue

Drug Resistance Mechanisms in Bacteria 3.0

Message from the Guest Editor

Drug resistance is a global problem. Resistance to carbapenems, the last resort treatment in *Klebsiella pneumoniae*, a common intestinal bacterium that can cause life-threatening infections, has spread worldwide. Resistance in *E. coli* to fluoroquinolone, one of the most widely used antibiotics for treating urinary tract infections, is also pervasive. Colistin is the last resort treatment for life-threatening infections caused by Enterobacteriaceae, which are resistant to carbapenems. Various mechanisms can cause drug resistance. One of the most common means involves gene mutations that potentially cause alterations in the drug targets so that the drugs cannot bind the targets. Another common mechanism consists of the expression of higher levels of the targets. The genes responsible for these mechanisms may be chromosomally encoded, or transmissible through plasmids and transposons. In this Special Issue, we plan to continue collecting original research articles, short communications, or review articles discussing bacterial resistance mechanisms' genetic and molecular basis.

Guest Editor

Dr. Apichai Tuanyok

Department of Infectious Diseases and Immunology, College of Veterinary Medicine, University of Florida, Gainesville, FL 32608, USA

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Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
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The International Journal of Molecular Sciences (*IJMS*, ISSN 1422-0067) is an open access journal, which was established in 2000. The journal aims to provide a forum for scholarly research on a range of topics, including biochemistry, molecular and cell biology, molecular biophysics, molecular medicine, and all aspects of molecular research in chemistry. *IJMS* publishes both original research and review articles, and regularly publishes special issues to highlight advances at the cutting edge of research. We invite you to read recent articles published in *IJMS* and consider publishing your next paper with us.

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Prof. Dr. Maurizio Battino

Department of Odontostomatologic and Specialized Clinical Sciences,
Sez-Biochimica, Faculty of Medicine, Università Politecnica delle
Marche, Via Ranieri 65, 60100 Ancona, Italy

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