



Drug Resistance Mechanisms in Bacteria 3.0

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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Message from the Guest Editor

Dear Colleagues,

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.





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Prof. Dr. José L. Quiles

Department of Physiology,
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Message from the Editor-in-Chief

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