Special Issue

The Models for Antimicrobial Compounds Testing

Message from the Guest Editors

More than 35000 people die from antimicrobial-resistant infections in the EU/EEA each year. The multidrug resistance hurdle combined with the fact that only two new classes of antibiotics were developed in the last 40 years, points out for the urgency to find alternatives to antibiotics. Novel compounds are generally screened in vitro to assess their effectiveness and potential toxicity, and then successful candidates proceed to pre-clinical trials using animal models, including insects like *Galleria mellonella*, and *Drosophila melanogaster*, nematodes like *Caenorhabditis elegans*, and mammals, before clinical trials in humans. To tackle the worldwide problem of antibiotic resistance, the establishment of infection models to study microbial infections and assess the efficacy of novel and conventional antimicrobials is crucial. We are interested in qualitative and quantitative research on the use of different animal models for drug screening of new and conventional antimicrobials, and their use in resistance-related microbial infection research. Research on alternative in vitro models for drug screening is also welcome.

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Message from the Editor-in-Chief

There are very few fields that attract as much attention as scientific endeavor related to antibiotic discovery, use and preservation. The public, patients, scientists, clinicians, policy-makers, NGOs, governments, and supra-governmental organizations are all focusing intensively on it: all are concerned that we use our existing agents more effectively, and develop and evaluate new interventions in time to face emerging challenges for the benefit of present and future generations. We need every discipline to contribute and collaborate: molecular, microbiological, clinical, epidemiological, geographic, economic, social scientific and policy disciples are all key. *Antibiotics* is a nimble, inclusive and rigorous indexed journal as an enabling platform for all who can contribute to solving the greatest broad concerns of the modern world.

Editor-in-Chief

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