



## Bioactive Peptides and Their Antibiotic Activity

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### Message from the Guest Editor

AMPs are produced by organisms as a defense mechanism against pathogenic microbes. Initial studies on defense peptides identified defensins, cecropins, retropins and cathelicidins, which have different structures and bioactivities. Antimicrobial peptides can be classified according to their source (animal, plant, microbial, insect, amphibian, aquatic), and by their structure ( $\alpha$ -helix,  $\beta$ -sheet, both  $\alpha$ -helix and  $\beta$ -sheet, linear). They are also classified based on species rich in amino acids (especially Gly, Arg, Pro, His and Trp), and depending on their activity (e.g., antimicrobial, antiviral, antiparasitic, antifungal, anti-inflammatory and anticancer). Thus, peptides are considered promising molecules not only for application as antimicrobial therapy, but also in immunomodulatory, anticancer, antioxidant and other applications. Currently, many in silico analysis methods have been helping to target peptides for antimicrobial applications. Molecular biology techniques associated with bioinformatics are also providing good results in obtaining more effective AMPs





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## Editor-in-Chief

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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.

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