Special Issue

Antimicrobial Peptides from Natural Sources to Synthetic Optimization

Message from the Guest Editors

Antimicrobial peptides (AMPs) are considered the main resource for the development of new therapeutic alternatives against antimicrobial infections. AMPs have been identified in plants and animals with very diverse primary and secondary structures, which give them physicochemical properties that are fundamental for their antimicrobial activity. AMPs that have been identified and/or isolated from natural sources are the starting point for the design and development of new molecules with enhanced antimicrobial activity and in some cases these AMPs have been commercialized, increasing our therapeutic options. The design and optimization of peptide sequences involves different synthetic strategies such as: obtaining short linear sequences, dendrimers, cyclic peptides, dimeric peptides, tetrameric peptides, polymeric peptides, inclusion of non-natural amino acids, D-amino acids, organic molecules of non-peptide origin, etc. These modifications require the simultaneous use of methodologies such as solid phase and solution chemical synthesis, click chemistry, oxidation reactions, recombinant technology, etc.

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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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