



Molecular Methods in Antibiotics Discovery

Guest Editor:

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Deadline for manuscript
submissions:

closed (15 January 2024)

Message from the Guest Editor

Dear Colleagues,

The introduction of antibiotics into clinical practice in the 20th century has revolutionized modern medicine, extending the average human lifespan by more than two decades. The discovery of penicillin in 1928 was the beginning of the golden age of antibiotics discovery which was peaking in the 1950s. However, today, only a few new antibiotics are in the clinical trials pipeline.

Antibiotics are mostly derived from natural sources, and antibiotic resistance is known to have existed since prehistoric times. Extensive use of antibiotics has resulted in a strong selective pressure and, consequently, the advancement of resistant bacterial strains, leading to the current antibiotic resistance crisis. New antibiotic compounds are urgently needed.

Financial incentives for the development of new antibiotics are limited, as antibiotics are usually inexpensive and only used for a short time. Additionally, new antibiotics are often reserved as a last resort, potentially limiting their use even further. This highlights the need for publicly funded academic laboratories to take on the task of antibiotics discovery.





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Editor-in-Chief

Prof. Dr. Nicholas Dixon

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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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