Special Issue

Clostridioides difficile Infection: Pathogenesis, Antibiotic Resistance, and Therapeutic Advances

Message from the Guest Editor

Clostridioides difficile remains a leading cause of nosocomial diarrhea, as well as severe complications such as pseudomembranous colitis and life-threatening toxic megacolon. Currently, the treatment options for CDI are limited. First-line drugs primarily include antibiotics such as vancomycin and fidaxomicin, which are effective in treating initial episodes. However, the recurrence rates remain high among patients treated with antibiotics. Although fecal microbiota-based therapies have emerged for recurrent CDI (rCDI), their accessibility and regulatory acceptance are still evolving. For this Special Issue, we invite original research and comprehensive review articles in (but not limited to) the following areas:

- The development of novel antimicrobial agents targeting *C. difficile*;
- Advances in therapeutic strategies for CDI;
- Molecular mechanisms of antibiotic resistance in C. difficile,
- Pathogenesis and host-pathogen interactions in CDI;
- Antibiotic stewardship approaches to preventing CDI and transmission.

Guest Editor

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About the Journal

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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