Special Issue

Unlocking the Secrets Behind Drug Resistance at the Cellular Level

Message from the Guest Editors

Drug resistance is becoming a growing health concern. It can be developed by simple prokaryote cells to complex eukaryote cells, such as cancer cells. The World Health Organization (WHO) has identified antimicrobial resistance as one of the three significant public health challenges of the twenty-first century. Additionally, chemoresistance associated with cancer treatments is another big challenge of this century, and it is expected to increase in the coming years.This Special Issue will contribute to the understanding of the underlying cellular mechanisms that lead to drug resistance. This issue aims to examine the mechanisms behind antibiotic resistance. In addition, it will investigate the ways by which drug resistance is developed in cancer, generally linked with several factors such as apoptotic pathways, immune system dysfunction, epigenetic changes and the activation of detox systems such as ROS. Understanding the mechanisms behind drug resistance can trigger the development of new strategies to improve treatment efficacy in these two different disease contexts.

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Cells has become a solid international scientific journal that is now indexed on SCIE and in other databases. We have successfully introduced a special issues format so that these issues serve as mini-forums in specific areas of cell science. *Cells* encourages researchers to suggest new special issues, serve as special issues editors, and volunteer to be reviewers. Our main focus will remain on cell anatomy and physiology, the structure and function of organelles, cell adhesion and motility, and the regulation of intracellular signaling, growth, differentiation, and aging. We are open to both original research papers and reviews.

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