Special Issue

Human Organoids: A New Frontier in Disease Modeling

Message from the Guest Editors

Organoids—three-dimensional (3D) cultures derived from pluripotent, fetal, or adult stem cells-faithfully recapitulate key structural and functional features of native organs. Encompassing a wide spectrum of models, including cellular spheroids, reconstructed 3D tissues, and bioengineered organ-like systems. organoids offer unprecedented opportunities not only in regenerative medicine but also as in vitro platforms to study complex biological processes. Human organoids enable the exploration of otherwise inaccessible aspects of human development, overcoming challenges posed by limited tissue availability and ethical constraints. This Special Issue highlights the rapidly evolving landscape of organoid technologies, which are emerging as transformative tools for modeling human development, physiology, and disease. We aim to showcase cutting-edge research that leverages human organoids for diverse applications, including regenerative medicine, embryonic development, hostpathogen interactions, high-throughput drug screening, therapeutic efficacy testing, and precision medicine. We particularly encourage submissions that employ organoid systems to elucidate disease mechanisms.

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About the Journal

Message from the Editorial Board

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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