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3D Cultures, Organoids, Organ-on-Chip: New Research and Innovation Challenges in Reproduction

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Deadline for manuscript submissions:

closed (28 February 2022)

Message from the Guest Editors

Dear Colleagues,

We are facing a sort of revolution in biology and biotechnology. The experimental approaches used to explore both physiological and pathological phenomena *in vitro* and *in vivo* are very quickly evolving, moving from simple bi-dimensional systems to more complex and reliable set-ups, such as 3D cultures, 3D and 4D printed devices, and organ-on-chip. These new techniques are having increasingly applicative implications in virtually all the fields of biotechnologies and, in particular, in reproductive and regenerative medicine. The application of these innovative techniques, which involve research, clinical approaches, regenerative medicine, and material science, together with the use of the reproductive cells, will provide great advances in human and veterinary medicine contributing to the investigation of both basic and applied issues.

This Special Issue on welcomes original research articles that illustrate and stimulate the growing efforts to understand the implication of reproductive cells in physiological conditions, such as developmental biology; embryology; and their application.



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Special Issue



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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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