Special Issue

Human Pluripotent Stem Cell-Based Disease Modeling

Message from the Guest Editors

Human pluripotent stem cells (hPSCs), including embryonic stem or induced pluripotent stem cells (hESCs/hiPSCs), differentiated into specific types of cells have been accepted as a promising model for studying human disease and as potential cell sources for transplantation. Particularly, disease-specific hiPSCs provide us with an exceptional opportunity to recapitulate human disease phenotypes in vitro, thereby enabling disease investigation and drug development; although, there are several challenges which need to be addressed. In this Special Issue, we respectfully invite original research (articles, short communications, and reviews) addressing the following topics:

- Development of hPSC-based disease models;
- Improvement of hPSC-based disease models;
- Application of hPSC-based disease models;
- Generation of hPSC-derived human cells or organoids;
- Development of hPSC-based cell therapies;
- Optimization of hPSC-based cell therapies.

We hope that this Special Issue will highlight the power of stem-cell-based approaches for asking fundamental disease questions with regard to human cells.

Guest Editors

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Deadline for manuscript submissions

closed (31 December 2021)

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A major strength of biological science is the diversity of approaches that biological scientists apply to their research problems. *Biology* reflects this diversity and brings together studies employing the varied experimental and theoretical approaches that are fueling biological discovery. *Biology*, the journal, is a fully peer-reviewed publication with a rapid and economical route to open access publication and is listed on PubMed. All articles are peer-reviewed and the editorial focus is on determining that the work is scientifically sound rather than trying to predict its future impact.

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