

## Special Issue

# Research in iPSC-Based Disease Models

### Message from the Guest Editor

Induced pluripotent stem cells (iPSCs) represent a new disease model and drug discovery tool, challenging the current limitations of animal models. Patient-specific iPSCs provide unlimited access to disease-relevant cells that are difficult to harvest, such as brain neurons and cardiomyocytes. Phenotypes associated with various diseases can be monitored and tested by using diverse cell types differentiated from iPSCs in culture. Moreover, the emergent gene editing fields provide the capacity to introduce or correct disease mutations in iPSCs to assess their contributions. Editing disease mutations in iPSCs to generate isogenic controls can shed light onto the causal relationship between genotypes and phenotypes; therefore, iPSCs have emerged as a wonderful model to facilitate new drug discovery and drug repositioning in human health. This Special Issue will include recent advances in iPSC-based models of various diseases, in which gene editing is leveraged to highlight the impact of risk mutations.

### Guest Editor

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### Message from the Editor-in-Chief

The International Journal of Molecular Sciences (*IJMS*, ISSN 1422-0067) is an open access journal, which was established in 2000. The journal aims to provide a forum for scholarly research on a range of topics, including biochemistry, molecular and cell biology, molecular biophysics, molecular medicine, and all aspects of molecular research in chemistry. *IJMS* publishes both original research and review articles, and regularly publishes special issues to highlight advances at the cutting edge of research. We invite you to read recent articles published in *IJMS* and consider publishing your next paper with us.

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### Editor-in-Chief

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