



Research in iPSC-Based Disease Models

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Message from the Guest Editor

Dear Colleagues,

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.

Dr. Eric Deneault
Guest Editor





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Message from the Editor-in-Chief

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