Special Issue

In Vitro Modeling of the Craniofacial Disorders Using iPSCs/Organoids: Deciphering the Molecular and Genetic Mechanisms of Craniofacial Development

Message from the Guest Editors

Congenital craniofacial disorders, e.g., craniosynostosis, hemifacial microsomia, vascular malformation, positional plagiocephaly, cleft lip, and cleft palate influence the development of the skull and facial bones. Animal models have provided valuable insights into the congenital craniofacial anomalies (CFA) developmental processes. However, existing in vivo mouse models often fail to recapitulate the complexity of craniofacial developmental biology, limiting their utility in studying disease pathogenesis in human models. Therefore, there is a critical need for a relevant human cell model to elucidate the molecular and genetic basis of CFA and develop novel strategies for disease modeling and therapeutic intervention. One recent groundbreaking development in disease developmental biology is the advancement in iPSCs and organoid-based disease modeling.

This Special Issue provides an excellent platform to present and discuss iPSCs-based modeling. We welcome contributions that cover a range of topics related to in vitro iPSCs/organoid-based modeling of craniofacial abnormalities.

Guest Editors

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The *Journal of Developmental Biology* (*JDB*) publishes original research papers and timely reviews. Our primary aim is to provide a platform for the publication of studies on the development of multicellular organisms efficiently and professionally; papers undergo a fast, yet thorough, peer-review process. JDB is an open access journal and accepted contributions are published immediately online, providing unlimited access to the scientific community and general public. We look forward to receiving your contribution to our journal and to working with fellow researchers.

Editor-in-Chief

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