Asian Transplantation Week 2023

Nov. 15(Wed)~18(Sat), 2023
Conrad Seoul, Korea

Submission No.: CS14-9378
Session : Concurrent Symposium 14 (Basic)
Date & Time, Place : November 18 (Sat), 15:30-17:00, Room 6F-1
Session Title : Biology of organoids

Introduction of organoid biology

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The biology of epithelial tissues, particularly the dynamic interactions among the various cell types within these tissues, has been challenging to study due to limited access to functional epithelial samples. The emergence of technologies that harness cells to cultivate epithelial organoids has become a transformative leap in this field. These methodologies enable useful modelling of the multifaceted communications between cell types, spanning across both developmental and pathological contexts. In this fundamental session, we will embark on an in-depth exploration into the organoids systems derived from gut, lung, liver, bladder, or taste bud tissue. Each of these organoid models stands as a useful model to cutting-edge biomedical innovation, furnishing unprecedented insights into tissue-specific biology, complex disease pathologies, and the potential of therapeutic avenues. Our overarching vision is to shed light on studying the epithelial biology, emerging from the complex cell-to-cell interactions. This subsequently enhances our understanding of the molecular and cellular mechanisms underlying epithelial tissue-related pathologies, thereby defining new paradigms for advanced biomedical investigations.