

STEMCELL Technologies

Advancing Organoid Models: Introducing New Capabilities for Intestinal,

by Salvatore Simmini

Organoids and other organotypic model systems are powerful tools for research approaches in modelling and understanding human health and disease. STEMCELL Technologies supports researchers using organoids with high-quality cell culture media and kits that enable robust establishment, expansion, maintenance, and differentiation of organoid cultures. In this presentation, we will introduce our new culture systems for intestinal, airway, and hepatic cells.

In the context of intestinal tissue modelling, we will describe a new approach to simultaneously expand and differentiate intestinal organoids. We will also present a scalable, reproducible and physiologically relevant method to expand human bronchial epithelial cells (hBECs), as well as describe a workflow for establishing, expanding, and differentiating liver organoid cultures from PSCs. These tools enable researchers to model tissue-specific biology with donor fidelity, advancing applications in regenerative medicine, disease modeling, and toxicity testing. Together, these innovations provide a robust platform for accelerating organoid-based research across multiple human organ systems.

STEMCELL Technologies supports biomedical research worldwide with more than 2500 tools and services used by scientists working in stem cell research, regenerative medicine, and disease research. Driven by a love of science and a passion for quality, STEMCELL is a company of Scientists Helping Scientists.