

Special Issue

Intestinal 3D Culture, Organoids and Gut-on-Chip in Intestinal Disorders

Message from the Guest Editors

Three-dimensional (3D) culture systems, including relatively simple cell aggregates (spheroids) and increasingly functional organ-like or organotypic microtissues (organoids and tissue-on-a-chip), have recently garnered significant attention because they often promote levels of cell differentiation and tissue organization not possible in conventional 2D culture systems. Indeed, 3D cultures represent an ideal model for studying the pathophysiological mechanisms underlying intestinal functional diseases and inflammatory diseases—including inflammatory bowel disease (IBD), irritable bowel syndrome (IBS), obesity, and colorectal cancer—and for testing new drugs. The application of these innovative techniques will provide great advances in human medicine, contributing to the identification of new molecular targets and personalized medicine.

This Special Issue, invites researchers to contribute original research articles, review articles, and short communications related to current knowledge on 3D culture systems used, both technically and scientifically in this research field.

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