Special Issue

Gut Microbiota, Metabolites, and Immune Regulation in Gastrointestinal Diseases

Message from the Guest Editors

In recent years, gut microbiota and microbial metabolites have emerged as regulators of gastrointestinal (GI) diseases. The gut microbiota and its metabolites play a critical role in immune regulation, influencing both local and systemic immune responses in the GI tract and beyond. In GI diseases, an imbalanced microbiome (dysbiosis) disrupts this delicate equilibrium, contributing to chronic inflammation and disease progression. Inflammatory Bowel Disease (IBD), Irritable Bowel Syndrome (IBS), and colorectal cancer (CRC) are among the several GI disorders that arise because of immune homeostasis being altered by microbial dysbiosis and changed metabolites. Gut barrier dysfunction, chronic inflammation and susceptibility to other diseases are major concerns for GI diseases. Therapeutic strategies targeting or manipulating the gut microbiota and its metabolites represent a promising avenue for novel GI disease therapies. This Special Issue welcomes manuscripts focusing on any aspect of gut microbiota, metabolite and immunoregulations related to GI diseases.

Guest Editors

Dr. Sweta Ghosh

Department of Microbiology and Immunology, Brown Cancer Center, Center for Microbiomics, Inflammation and Pathogenicity, University of Louisville, 505 S. Hancock St., Louisville, KY 40202, USA

Dr. Subir Kumar Juin

Department of Microbiology and Immunology, University of Louisville School of Medicine, 505 S. Hancock St., Louisville, KY 40202, USA

Deadline for manuscript submissions

31 August 2026



Cells

an Open Access Journal by MDPI

Impact Factor 5.2 CiteScore 10.5 Indexed in PubMed



mdpi.com/si/253731

Cells
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
cells@mdpi.com

mdpi.com/journal/cells





Cells

an Open Access Journal by MDPI

Impact Factor 5.2 CiteScore 10.5 Indexed in PubMed



About the Journal

Message from the Editorial Board

Cells has become a solid international scientific journal that is now indexed on SCIE and in other databases. We have successfully introduced a special issues format so that these issues serve as mini-forums in specific areas of cell science. Cells encourages researchers to suggest new special issues, serve as special issues editors, and volunteer to be reviewers. Our main focus will remain on cell anatomy and physiology, the structure and function of organelles, cell adhesion and motility, and the regulation of intracellular signaling, growth, differentiation, and aging. We are open to both original research papers and reviews.

Editors-in-Chief

Dr. Alexander E. Kalyuzhny

Dental Basic Sciences, University of Minnesota, 308 Harvard St. SE, Minneapolis, MN 55455, USA

Prof. Dr. Cord Brakebusch

Biotech Research & Innovation Centre, The University of Copenhagen, Copenhagen, Denmark

Author Benefits

High Visibility:

indexed within Scopus, SCIE (Web of Science), PubMed, MEDLINE, PMC, CAPlus / SciFinder, and other databases.

Journal Rank:

JCR - Q2 (Cell Biology) / CiteScore - Q1 (General Biochemistry, Genetics and Molecular Biology)

Rapid Publication:

manuscripts are peer-reviewed and a first decision is provided to authors approximately 16 days after submission; acceptance to publication is undertaken in 2.7 days (median values for papers published in this journal in the first half of 2025).

