

## Special Issue

# Decoding Colorectal Cancer: Innovations in Biomarkers, Microbiota, and Therapeutic Resistance

### Message from the Guest Editor

Colorectal cancer (CRC) remains one of the leading causes of cancer-related mortality worldwide, necessitating continuous advancements in its prevention, diagnosis, and treatment. In recent years, a deeper understanding of CRC pathogenesis has revealed complex molecular signatures, tumor microenvironmental interactions, and host–microbiota dynamics that contribute to disease progression and therapeutic resistance. Notably, innovations in biomarker discovery—from circulating tumor DNA and exosomal RNAs to metabolic and microbial signatures—are reshaping early detection and paving the way for personalized therapeutic strategies. This Special Issue aims to showcase cutting-edge research that deciphers the biological complexity of CRC. We welcome studies investigating the interplay between tumor genomics, gut microbiota, and resistance to chemotherapy, targeted therapy, and immunotherapy. Contributions utilizing emerging technologies such as multi-omics integration, organoid models, AI-driven radiomics, and spatial transcriptomics are particularly encouraged.

### Guest Editor

Dr. Yinghao Cao

1. Cancer Center, Union Hospital, Tongji Medical College, Huazhong University of Science and Technology, Wuhan 430022, China
2. Department of Diagnostic Radiology, Surgery, Chemical and Biomolecular Engineering, and Biomedical Engineering, Yong Loo Lin School of Medicine, College of Design and Engineering, National University of Singapore, Singapore 119074, Singapore
3. Clinical Imaging Research Centre, Centre for Translational Medicine, Yong Loo Lin School of Medicine, National University of Singapore, Singapore 117599, Singapore

### Deadline for manuscript submissions

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Editorial Office  
MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland  
Tel: +41 61 683 77 34  
[biomedicines@mdpi.com](mailto:biomedicines@mdpi.com)

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### Message from the Editor-in-Chief

*Biomedicines* (ISSN 2227-9059) is an open access journal devoted to all aspects of research on human health and disease, the discovery and characterization of new therapeutic targets, therapeutic strategies, and research of naturally driven biomedicines, pharmaceuticals, and biopharmaceutical products. Topics include pathogenesis mechanisms of diseases, translational medical research, biomaterial in biomedical research, natural bioactive molecules, biologics, vaccines, gene therapies, cell-based therapies, targeted specific antibodies, recombinant therapeutic proteins, nanobiotechnology driven products, targeted therapy, bioimaging, biosensors, biomarkers, and biosimilars. The journal is open for publication of studies conducted at the basic science and preclinical research levels. We invite you to consider submitting your work to *Biomedicines*, be it original research, review articles, or developing Special Issues of current key topics.

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### Editor-in-Chief

Prof. Dr. Felipe Fregni

1. Neuromodulation Center and Center for Clinical Research Learning, Spaulding Rehabilitation Hospital and Massachusetts General Hospital, Harvard Medical School, Boston, MA 02114, USA
2. Department of Epidemiology, Harvard T.H. Chan School of Public Health, Boston, MA 02115, USA

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