



## Precision Medicine in Inflammatory Bowel Diseases: Epigenetics, Gut Microbiome, Sex Differences and Beyond

Guest Editor:

**Dr. Alessandra Soriano**

1. Department of Pathology, Case Western Reserve University, Cleveland, OH 44106-1712, USA  
2. IBD Center, Gastroenterology Division, Department of Internal Medicine, Arcispedale S. Maria Nuova – IRCCS, 42121 Reggio Emilia, Italy

Deadline for manuscript submissions:

**closed (10 April 2023)**

### Message from the Guest Editor

Dear Colleagues,

The interplay between host genome, epigenetics, mucosal and systemic immunity, and gut microbiome in the pathogenesis of IBD is a matter of deep interest, both at basic and translational research level. The gut microbiome is able to shape both the intestinal and the systemic immune response. Inappropriate mucosal immunity/gut microbiome interaction can become detrimental and play a central role in driving the development and/or the worsening of IBD.

In an era moving toward precision medicine, a personalized and sex-based approach to treat IBD patients is strongly warranted. This Special Issue aims to discuss state-of-the art research on the human gut microbiome's role in the pathogenesis of IBD, and also as a potential contributor to sexual dimorphism in IBD. We will include epigenetics studies, such as those focused on circulating IBD methylome, as well as studies analyzing other 'omics' data (i.e., transcriptomics, metabolomics, proteomics).





an Open Access Journal by MDPI

## Editor-in-Chief

### Prof. Dr. Maurizio Battino

Department of  
Odontostomatologic and  
Specialized Clinical Sciences,  
Sez-Biochimica, Faculty of  
Medicine, Università Politecnica  
delle Marche, Via Ranieri 65,  
60100 Ancona, Italy

## Message from the Editor-in-Chief

The International Journal of Molecular Sciences (*IJMS*, ISSN 1422-0067) is an open access journal, which was established in 2000. The journal aims to provide a forum for scholarly research on a range of topics, including biochemistry, molecular and cell biology, molecular biophysics, molecular medicine, and all aspects of molecular research in chemistry. *IJMS* publishes both original research and review articles, and regularly publishes special issues to highlight advances at the cutting edge of research. We invite you to read recent articles published in *IJMS* and consider publishing your next paper with us.

## Author Benefits

**Open Access:** free for readers, with article processing charges (APC) paid by authors or their institutions.

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

**Journal Rank:** JCR - Q1 (Biochemistry and Molecular Biology) / CiteScore - Q1 (Inorganic Chemistry)

## Contact Us

---

*International Journal of Molecular  
Sciences* Editorial Office  
MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland

Tel: +41 61 683 77 34  
www.mdpi.com

mdpi.com/journal/ijms  
ijms@mdpi.com  
X@IJMS\_MDPI