

Special Issue

The Microbiota and Its Association with Cellular Transformation and Metabolic Changes, 2nd Edition

Message from the Guest Editors

In recent years, scientists have made significant discoveries concerning the link between human microbiota and both human cancers and metabolic changes. New findings suggest altered immune responses, metabolism shifts, and dysregulated kinase activation, which potentially impairs cellular signal transduction. In vitro studies also revealed that certain bacteria can drive epigenetic changes, and stimulate the production of inflammatory substances that may cause DNA damage. In vivo experiments have demonstrated that administering cancer-causing agents to germ-free animals results in less tumor formation compared to non-germ-free mice. However, the exact mechanisms of cellular transformation remain largely mysterious. This Special Issue aims to gather original research articles and review papers exploring any aspect of the interaction between the human microbiota and host cells. The focus is on the description and elucidation of the potential molecular mechanisms that may promote cellular transformation and metabolic changes, we also encourage the submission of papers examining its effects on cardiovascular diseases, diabetes, and reproductive issues, among others.

Guest Editors

Dr. Davide Zella

Department of Internal Medicine, Morsani College of Medicine,
University of South Florida, Tampa, FL 33612, USA

Dr. Francesca Benedetti

Department of Internal Medicine, Morsani College of Medicine,
University of South Florida, Tampa, FL 33612, USA

Deadline for manuscript submissions

closed (20 June 2025)



International Journal of Molecular Sciences

an Open Access Journal
by MDPI

Impact Factor 4.9
CiteScore 9.0
Indexed in PubMed



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*International Journal of
Molecular Sciences*
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MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
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Editor-in-Chief

Prof. Dr. José L. Quiles
Department of Physiology, Institute of Nutrition and Food Technology
"Jose Mataix", Biomedical Research Center, University of Granada,
Avda. Conocimiento s/n, 18100 Armilla, Granada, Spain

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