



## Gangliosides: Modes of Action and Cell Fates

Guest Editor:

**Prof. Dr. Koichi Furukawa**

Department of Biomedical  
Sciences, Chubu University  
College of Life and Health  
Sciences, Kasugai 487-8501,  
Japan

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### Message from the Guest Editor

Gangliosides, sialic acid-containing glycosphingolipids are ubiquitously expressed mainly on the cell membrane in vertebrates. The structure of carbohydrate moieties varies depending on the development and differentiation of tissues and cells. The main findings can be summarized as: (i) Gangliosides play a pivotal role in the maintenance of the integrity of nervous systems, and also in repair of damaged nerve tissues; (ii) Gangliosides are important for the architecture and function of membrane microdomains such as lipid rafts; and (iii) Gangliosides regulate cell signals at lipid rafts based on the interaction with ganglioside-recognizing molecules, leading to the decision of cell fates. The molecular cluster formation around gangliosides is now attracting many researchers in this field. We would like to focus on the modes of action and resulting cell fates to further understand the implication of gangliosides in our bodies. This Special Issue calls for original research and reviews and perspectives that address the progress and current knowledge in the research on gangliosides, their modes of action and cell fates.





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### Prof. Dr. Maurizio Battino

Department of  
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delle Marche, Via Ranieri 65,  
60100 Ancona, Italy

## Message from the Editor-in-Chief

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*International Journal of Molecular  
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MDPI, Grosspeteranlage 5  
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