



## Mechanisms of the Endocannabinoid System and Their Role in Neurophysiology and Psychopathology

Guest Editor:

**Prof. Dr. Birgit Abler**

Department of Psychiatry and  
Psychotherapy III, Ulm University,  
Leimgrubenweg 12-14, 89075  
Ulm, Germany

Deadline for manuscript  
submissions:

**20 September 2024**

### Message from the Guest Editor

Dear Colleagues,

Recent research has demonstrated the involvement of the endocannabinoid system (ECS) in various psychological processes, including pain perception, emotion regulation and stress processing, as well as in mental disorders. However, despite its well-known pharmacological accessibility, treatment options specifically targeting this system and its components are still unoptimized, and there is still a need for further research on the molecular level. Basic in vitro and in vivo experiments and clinically oriented research in animals and humans on how the ECS and its modulation affect neural processing, psychological functioning and behaviour in health and disease could contribute to a better understanding of this system's mechanisms and inform the development of tailored treatment options.

Guest-edited by Prof. Dr. Birgit Abler with assistance from Dr. Jennifer Spohrs, a Topical Advisory Panel Member, this Special Issue focuses on recent studies that contribute to the understanding of the functioning of the ECS in psychopathology as well as potential therapeutic applications.

Prof. Dr. Birgit Abler  
*Guest Editor*





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