

## Special Issue

# Glial Cells and Energy Intake: A Field That Is Gaining Weight

### Message from the Guest Editors

The control of body weight is complex and involves numerous factors controlling both the intake and expenditure sides of the energy balance equation. The brain contributes to the control of energy balance by integrating information linked to nutritional status which arises from peripheral organs. So far, most research on this field has focused on neuronal signaling, while the role of glial cells has been poorly explored. Our view of glial cells has evolved considerably over recent decades and these cells are now recognized as partners of neurons in contributing to brain functioning. Emerging evidence also suggests a significant role for glia (astrocytes, tanocytes, and microglia) in the control of energy balance. This Special Issue will be devoted to the recent advances in the role of glial cells in the regulation of energy balance, with a special emphasis on glial plasticity; the transport of nutrients, neurotransmitters, and hormones; glial receptor expression and responsiveness to metabolic signal; and gliotransmitter release. Original research articles and reviews are welcome.

### Guest Editors

Prof. Dr. Jean-Denis Troadec

Cognitive Neurosciences Laboratory- CNRS 7291, Aix-Marseille University, Marseille, France

Dr. Bruno Lebrun

Laboratoire de Neurosciences Cognitives, Aix-Marseille Université, Marseille, France

### Deadline for manuscript submissions

closed (31 December 2021)



## International Journal of Molecular Sciences

---

an Open Access Journal  
by MDPI

---

Impact Factor 4.9  
CiteScore 9.0  
Indexed in PubMed



[mdpi.com/si/63024](https://mdpi.com/si/63024)

*International Journal of  
Molecular Sciences*  
Editorial Office  
MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland  
Tel: +41 61 683 77 34  
[ijms@mdpi.com](mailto:ijms@mdpi.com)

[mdpi.com/journal/  
ijms](https://mdpi.com/journal/ijms)





# International Journal of Molecular Sciences

---

an Open Access Journal  
by MDPI

---

Impact Factor 4.9  
CiteScore 9.0  
Indexed in PubMed



[mdpi.com/journal/  
ijms](https://mdpi.com/journal/ijms)



## About the Journal

### 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.

---

### 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

---

### 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 (Organic Chemistry)