

Special Issue

Reproductive Physiology and miRNA-Mediated Gene Regulation in Domestic Animals

Message from the Guest Editors

The Special Issue focuses on the interplay between reproductive physiology in domestic animals and the role of microRNAs (miRNAs) in gene regulation. Specifically, the main topic concerns how miRNAs influence reproductive processes such as oocyte maturation, spermatogenesis, and pregnancy. miRNAs are small non-coding RNA molecules that regulate gene expression by binding to specific messenger RNA molecules. This mechanism can significantly impact fertility, reproductive health, and embryo development in domestic animals. In summary, the theme intertwines reproductive biology and molecular biology, aiming to understand how epigenetic regulation mechanisms can affect reproduction and enhance animal health management.

Guest Editors

Dr. Margherita Maranesi

Department of Veterinary Medicine, University of Perugia, Via San Costanzo 4, 06126 Perugia, Italy

Dr. Gabriella Guelfi

Department of Veterinary Medicine, University of Perugia, Via San Costanzo 4, 06126 Perugia, Italy

Deadline for manuscript submissions

20 November 2025



International Journal of Molecular Sciences

an Open Access Journal
by MDPI

Impact Factor 4.9
CiteScore 9.0
Indexed in PubMed



mdpi.com/si/221684

*International Journal of
Molecular Sciences*
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
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)