

Special Issue

Molecular Sexual Determination and Differentiation in Fishes

Message from the Guest Editor

Many aspects of the genes involved in sexual determination and differentiation are still unknown, and there are no molecular markers for sex identification in many species. The process of determining sex is a complex one, controlled by a large number of genes, which are influenced by various genetic and environmental factors. In some vertebrates, sex chromosomes differ between males and females, whereas in others there is no difference. Genital development is also monitored by genes that encode various hormones, which bind to receptors and initiate various biological processes. The structure, mechanism, and expression of genes in the processes of differentiation and sex determination are the focus of this Special Issue, with particular attention paid to the differences between males and females. Studying the variation in the sex-based differences in genomic sequences and in the gene expression of vertebrates has important theoretical applications, and warrants further research.

Guest Editor

Prof. Dr. Gad Degani

1. MIGAL–Galilee Research Institute, POB 831, Kiryat Shmona 1101602, Israel

2. Faculty of Science and Technology, Tel-Hai Academic College, Upper Galilee 1220800, Israel

Deadline for manuscript submissions

closed (20 June 2022)



International Journal of Molecular Sciences

an Open Access Journal
by MDPI

Impact Factor 4.9
CiteScore 9.0
Indexed in PubMed



mdpi.com/si/102337

*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)