



*life*



an Open Access Journal by MDPI

## Sex Determination and Gonad Development: From Mechanism to Application

Guest Editor:

**Prof. Dr. Daji Luo**

State Key Laboratory of  
Freshwater Ecology and  
Biotechnology, Institute of  
Hydrobiology, Innovation  
Academy for Seed Design,  
Chinese Academy of Sciences,  
Wuhan 430072, China

Deadline for manuscript  
submissions:

**closed (30 September 2022)**

### Message from the Guest Editor

Sex determination and gonad development are critically important for the continuity of species with reproduction. How the primordial germ cells and the bipotential gonadal primordium develop into either an ovary or testis that produces egg or sperm cells, respectively, is still a fascinating question. Both genetic factors and environmental factors contribute to sex determination and differentiation in varying degrees depending on species. Recently, the rapid progress of omics research has provided plenty of valuable data and opportunities to push the field forward. Hence, we have decided to set up this Special Issue of *Life*. The aim and scope include but are not limited to the evolutionary origin of sexual differentiation, the molecular and cellular mechanisms controlling gonad development and gametogenesis, the biological functions of sex-related genes, agricultural animal sex-controlled breeding, the artificial reproduction of economic and endangered species, and human reproductive health and disorders. Research and review papers on all aspects of sex determination and gonad development are welcomed.



[mdpi.com/si/98615](https://mdpi.com/si/98615)

# Special Issue



*life*



an Open Access Journal by MDPI

## Editor-in-Chief

**Prof. Dr. Lluís Ribas de Pouplana**

Institute for Research in Biomedicine (IRB Barcelona), The Barcelona Institute of Science and Technology, 08028 Barcelona, Spain

## Message from the Editor-in-Chief

*Life* (ISSN 2075-1729) is an international, peer-reviewed open access journal that publishes scientific studies related to fundamental themes in life sciences. Some papers are published individually, while others are submitted for inclusion in special issues with guest editors. You are invited to contribute a research article, essay, or a review to be considered for publication.

## 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](#), [CAPus / SciFinder](#), [AGRIS](#), and [other databases](#).

**Journal Rank:** JCR - Q2 (*Biology*) / CiteScore - Q2 (*Paleontology*)

## Contact Us

*Life* Editorial Office  
MDPI, St. Alban-Anlage 66  
4052 Basel, Switzerland

Tel: +41 61 683 77 34  
[www.mdpi.com](http://www.mdpi.com)

[mdpi.com/journal/life](http://mdpi.com/journal/life)  
[life@mdpi.com](mailto:life@mdpi.com)  
[X@Life\\_MDPI](#)