

## Special Issue

# Advances in Molecular Cytogenetics

### Message from the Guest Editor

Since its origin many decades ago, classical cytogenetics has been a crucial tool in the life sciences. During this time, technical advancements have been made and applied in both research and diagnostics. In medicine, the obtained results are universally well-known and appreciated. With cytogenetics, cellular biology improved the knowledge of nucleus, nucleolus, chromosomes, and chromatin, and the advent of molecular cytogenetics confirmed the necessity of continuing the efforts to deepen our knowledge of the molecular bases of genetic diseases. The aim of this Special Issue is to describe the state-of-the-art of cytogenetics and identify its future evolutions. The main topics that will be treated are:

- The role of conventional cytogenetics in the genomic era;
- FISH: metaphasic and/or interphasic;
- The role of chromosomal microarrays in prenatal diagnosis of fetal structural abnormalities;
- Is fiber FISH the future?
- The applications of advanced cytogenetic techniques in peculiar cases.

---

### Guest Editor

Dr. Igor Lebedev

Research Institute of Medical Genetics, Tomsk National Research Medical Center of the Russian Academy of Sciences, Tomsk, Russia

---

### Deadline for manuscript submissions

closed (31 May 2023)



## Biomedicines

---

an Open Access Journal  
by MDPI

---

Impact Factor 4.5  
CiteScore 7.8  
Indexed in PubMed



[mdpi.com/si/72557](https://mdpi.com/si/72557)

*Biomedicines*  
Editorial Office  
MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland  
Tel: +41 61 683 77 34  
[biomedicines@mdpi.com](mailto:biomedicines@mdpi.com)

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





# Biomedicines

---

an Open Access Journal  
by MDPI

---

Impact Factor 4.5  
CiteScore 7.8  
Indexed in PubMed



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



## About the Journal

### Message from the Editor-in-Chief

*Biomedicines* (ISSN 2227-9059) is an open access journal devoted to all aspects of research on human health and disease, the discovery and characterization of new therapeutic targets, therapeutic strategies, and research of naturally driven biomedicines, pharmaceuticals, and biopharmaceutical products. Topics include pathogenesis mechanisms of diseases, translational medical research, biomaterial in biomedical research, natural bioactive molecules, biologics, vaccines, gene therapies, cell-based therapies, targeted specific antibodies, recombinant therapeutic proteins, nanobiotechnology driven products, targeted therapy, bioimaging, biosensors, biomarkers, and biosimilars. The journal is open for publication of studies conducted at the basic science and preclinical research levels. We invite you to consider submitting your work to *Biomedicines*, be it original research, review articles, or developing Special Issues of current key topics.

---

### Editor-in-Chief

Prof. Dr. Felipe Fregni

1. Neuromodulation Center and Center for Clinical Research Learning, Spaulding Rehabilitation Hospital and Massachusetts General Hospital, Harvard Medical School, Boston, MA 02114, USA

2. Department of Epidemiology, Harvard T.H. Chan School of Public Health, Boston, MA 02115, USA

---

### Author Benefits

#### High Visibility:

indexed within Scopus, SCIE (Web of Science), PubMed, PMC, CAPlus / SciFinder, and other databases.

#### Journal Rank:

JCR - Q2 (Pharmacology and Pharmacy) / CiteScore - Q1 (Medicine (miscellaneous))

#### Rapid Publication:

manuscripts are peer-reviewed and a first decision is provided to authors approximately 21 days after submission; acceptance to publication is undertaken in 2.8 days (median values for papers published in this journal in the second half of 2025).