

## Topical Collection

# Epigenetic Regulation of Cellular Differentiation

### Message from the Collection Editor

Cell differentiation is a process through which newly formed cells acquire specific features required for the precise functions that they are to fulfill in the organism. Upon differentiation, cells alter not only their size, shape, motile/adhesive properties, etc., but also metabolic and other biochemical characteristics. All these changes are possible due to orchestrated and time-coordinated expression, or silencing, of multiple genes. The involvement of epigenetic factors, such as DNA methylation, histone modifications or micro RNAs, in the regulation of genes involved in cell differentiation is a recognized fact; however, what we still need to know is how the epigenetic changes accompanying cellular differentiation are tailored to execute a gene expression program appropriate for each cell/tissue type. The aim of this Special Issue is to bring together a set of reviews and research articles on the role of epigenetic regulation in cell differentiation in vitro and in vivo.

### Collection Editor

Prof. Dr. Wiesława Leśniak

Laboratory of Calcium Binding Proteins, Department of Molecular and Cellular Neurobiology, Nencki Institute of Experimental Biology of the Polish Academy of Sciences, 3 Pasteur Street, 02-093 Warsaw, Poland



## Epigenomes

an Open Access Journal  
by MDPI

Impact Factor 3.5  
CiteScore 4.4  
Indexed in PubMed



[mdpi.com/si/48634](https://mdpi.com/si/48634)

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

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





# Epigenomes

---

an Open Access Journal  
by MDPI

---

Impact Factor 3.5  
CiteScore 4.4  
Indexed in PubMed



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



## About the Journal

### Message from the Editor-in-Chief

In the past years the growth of the epigenetic field has been outstanding, from here the need of a journal where to centralize all new information on the subject. The term epigenetics is now broadly used to indicate changes in gene functions that do not depend on changes in the sequence of DNA. *Epigenomes* covers all areas of DNA modification from single cell level to multicellular organism as well as the epigenetics on human pathologies and behavior.

*Epigenomes* (ISSN 2075-4655) is a fully peer-reviewed publication outlet with a rapid and economical route to open access publication. All articles are peer-reviewed and the editorial focus is on determining that the work is scientifically sound rather than trying to predict its future impact.

---

### Editor-in-Chief

Prof. Dr. Ernesto Guccione

Icahn School of Medicine at Mount Sinai, Hess Center for Science and Medicine, New York, NY 10029, USA

---

### Author Benefits

#### High Visibility:

indexed within Scopus, ESCI (Web of Science), PMC, PubMed, Embase, PubAg, CAPUS / SciFinder, and other databases.

#### Journal Rank:

JCR - Q2 (Genetics and Heredity) / CiteScore - Q2 (Biochemistry, Genetics and Molecular Biology (miscellaneous))

#### Rapid Publication:

manuscripts are peer-reviewed and a first decision is provided to authors approximately 20.3 days after submission; acceptance to publication is undertaken in 2.8 days (median values for papers published in this journal in the first half of 2025).