



*cells*



an Open Access Journal by MDPI

## Nucleosome Structure, Dynamics and Interactions

Guest Editors:

### **Dr. Alexey V. Feofanov**

1. Bioengineering Department,  
Biological Faculty, M.V.  
Lomonosov Moscow State  
University, 119991 Moscow,  
Russia

2. Laboratory of Optical  
Microscopy and Spectroscopy of  
Biomolecules, Shemyakin and  
Ovchinnikov Institute of  
Bioorganic Chemistry, 117997  
Moscow, Russia

### **Prof. Dr. Vasily M. Studitsky**

1. Faculty of Biology, Lomonosov  
Moscow State University, 119234  
Moscow, Russia

2. Fox Chase Cancer Center,  
Philadelphia, PA 19111-2497, USA

Deadline for manuscript  
submissions:

**closed (20 July 2022)**

### **Message from the Guest Editors**

The nucleosome is a minimal structural unit of chromatin that modulates the access of various nuclear proteins involved in DNA repair, transcription and replication to DNA. Various DNA transactions are accompanied with changes in the nucleosome structure, varying from local alterations to dramatic unwrapping of DNA from the histone octamer and nucleosome unfolding. Histone variants and post-translational modifications introduce additional diversity into the repertoire of the structural changes. Nucleosomes and nucleosome-bound proteins are targets for various drugs, which differently affect the structure of nucleosome–protein complexes and block unwanted nuclear processes. Structural analysis of nucleosomes and their complexes with nuclear proteins aims to reveal basic principles of DNA functioning in normal and pathological cells.

The aim of this Special Issue is to provide an opportunity for researchers to present their latest results in the field of study of nucleosome structure, dynamics and interactions, and to summarize the most recent developments in the field.



[mdpi.com/si/108366](https://mdpi.com/si/108366)

# Special Issue



*cells*



an Open Access Journal by MDPI

## Editors-in-Chief

**Prof. Dr. Alexander E. Kalyuzhny**

Neuroscience, UMN Twin Cities,  
6-145 Jackson Hall, 321 Church St  
SE, Minneapolis, MN 55455, USA

**Prof. Dr. Cord Brakebusch**

Biotech Research & Innovation  
Centre, The University of  
Copenhagen, Copenhagen,  
Denmark

## Message from the Editorial Board

*Cells* has become a solid international scientific journal that is now indexed on SCIE and in other databases. We have successfully introduced a special issues format so that these issues serve as mini-forums in specific areas of cell science. *Cells* encourages researchers to suggest new special issues, serve as special issues editors, and volunteer to be reviewers. Our main focus will remain on cell anatomy and physiology, the structure and function of organelles, cell adhesion and motility, and the regulation of intracellular signaling, growth, differentiation, and aging. We are open to both original research papers and reviews.

## 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](#), [MEDLINE](#), [PMC](#), [CAPlus / SciFinder](#), and [other databases](#).

**Journal Rank:** JCR - Q2 (*Cell Biology*) / CiteScore - Q1 (General Biochemistry, Genetics and Molecular Biology)

## Contact Us

---

*Cells* Editorial Office  
MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland

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

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