

Special Issue

Stem Cells and Irradiation

Message from the Guest Editor

The main difficulty of radiotherapy is to destroy cancer cells without depletion of healthy tissue. Stem cells and cancers are tightly interrelated. On one hand, radiosensitivity/radioresistance of cancer stem cells affects the radiocurability of tumors. On the other hand, radiosensitivity is responsible for the stem cell depletion of organs at risk exposed to irradiation. Efficient solide cancer destruction is limited by the preservation of organ homeostasis. For this reason, targeted irradiation is an effective cancer therapy, but damage inflicted to normal tissues surrounding the tumor may cause severe complications. The consequences of stem cell depletion of healthy tissue irradiated are acute and chronic radiation diseases. Research on the radiosensitivity of cancer stem cells and adult stem cells associated with tissue regeneration medicine will bring forth the solution for optimal radiocurability associated with long-term patients' quality of life.

Guest Editor

Dr. Alain Chapel

1. IRSN PSE Sante SERAMED, Radiobiology of Medical Exposure Laboratory (LRMed), 92262 Fontenay, France
2. UPMC Univ Paris 06, UMR_S938 CDR Saint-Antoine, Stem Cell Proliferation and Differentiation, F-75012 Paris, France

Deadline for manuscript submissions

closed (30 November 2020)



Cells

an Open Access Journal
by MDPI

Impact Factor 5.1
CiteScore 9.9
Indexed in PubMed



mdpi.com/si/35903

Cells
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
cells@mdpi.com

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





Cells

an Open Access Journal
by MDPI

Impact Factor 5.1
CiteScore 9.9
Indexed in PubMed



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



About the Journal

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.

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

Author Benefits

High Visibility:

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

Journal Rank:

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

Rapid Publication:

manuscripts are peer-reviewed and a first decision is provided to authors approximately 17 days after submission; acceptance to publication is undertaken in 2.6 days (median values for papers published in this journal in the second half of 2024).