



*genes*



an Open Access Journal by MDPI

## Molecular Roadblocks for Cellular Differentiation, Transdifferentiation or Conversion

Guest Editors:

**Prof. Dr. Simona Chera**

1. Department of Clinical Science, University of Bergen, Bergen, Norway

2. Division of Endocrinology, Diabetes, Nutrition, Faculty of Medicine, University of Geneva, 1205 Geneva, Switzerland

**Dr. Luiza Ghila**

Department of Cell Physiology and Metabolism, Faculty of Medicine, University of Geneva, 1205 Geneva, Switzerland

Deadline for manuscript submissions:

**closed (15 July 2021)**

### Message from the Guest Editors

At all stages of life, cells are continuously subjected to the influence of various factors, usually originating from within the close cellular environment or niche. Maintaining the cell identity can therefore be viewed as an active process counteracting the natural trend to change, and not a passive immovable cellular state. It can be postulated that the regulation of cell fate maintenance is under the influence of molecular roadblocks opposing the intrinsic and extrinsic factors promoting the change. The modulation of these “cell conversion breaks” could prove crucial for treating pathologies characterized by massive cell decay. Moreover, understanding these molecular roadblocks will also improve the in vitro differentiation protocols by uncovering molecular inhibitory signals regulating cell fate switches.

This Special Issue in *Genes* on “Molecular Roadblocks for Cellular Differentiation, Transdifferentiation or Conversion” will address the responding mechanisms to instructive signals, with a focus on molecular brakes regulating cell identity, and thus impacting tissue regeneration or cell differentiation, as described in different experimental models.



[mdpi.com/si/76448](https://mdpi.com/si/76448)

# Special Issue



*genes*



an Open Access Journal by MDPI

## Editor-in-Chief

### **Prof. Dr. Selvarangan Ponnazhagan**

Department of Pathology, The  
University of Alabama at  
Birmingham, 1825 University  
Blvd, SHEL 814, Birmingham, AL  
35294-2182, USA

## Message from the Editor-in-Chief

Genes are central to our understanding of biology, and modern advances such as genomics and genome editing have maintained genetics as a vibrant, diverse and fastmoving field. There is a need for good quality, open access journals in this area, and the *Genes* team aims to provide expert manuscript handling, serious peer review, and rapid publication across the whole discipline of genetics. Starting in 2010, the journal is now well established and recognised.

Why not consider *Genes* for your next genetics paper?

## 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, Embase, PubAg, and other databases.

**Journal Rank:** JCR - Q2 (*Genetics & Heredity*) / CiteScore - Q2 (*Genetics*)

## Contact Us

---

*Genes* 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/genes](http://mdpi.com/journal/genes)  
[genes@mdpi.com](mailto:genes@mdpi.com)  
[X@Genes\\_MDPI](https://twitter.com/Genes_MDPI)