



an Open Access Journal by MDPI

# **Effect of Nutrients on Gene Expression and Cell Homeostasis**

Guest Editors:

### Prof. Dr. Diego Haro

 Department of Nutrition, Food Sciences and Gastronomy, School of Pharmacy and Food Sciences, Food Campus Torribera, University of Barcelona, E-08921 Santa Coloma de Gramenet, Spain
Institute of Biomedicine of the University of Barcelona (IBUB), University of Barcelona, E-08028 Barcelona, Spain

### Dr. Joana Relat

Deadline for manuscript submissions: closed (30 June 2020)



mdpi.com/si/29053

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

Dear Colleagues,

The ability to detect changes in nutrient levels and generate an adequate response to these changes is essential for the proper functioning of living organisms. Adaptation to the high degree of variability in nutrient intake requires the precise control of metabolic pathways. Mammals have developed different mechanisms to detect the abundance of nutrients and provide an integrated response. These mechanisms include the control of gene expression (from transcription to translation).

Frequently, alterations in these pathways underlie the onset of several metabolic pathologies. In this context, the complete understanding of these mechanisms may improve our knowledge of metabolic diseases and may offer new therapeutic approaches based on nutritional interventions and individual genetic makeups.

The aim of this Special Issue is to provide an overview of the key components and main molecular mechanisms that connect nutrients' levels, gene expression, and metabolic homeostasis. This Special Issue will include a selection of research papers and review articles covering this area of research.

Dr. Diego Haro Dr. Joana Relat *Guest Editors* 







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, St. Alban-Anlage 66 4052 Basel, Switzerland Tel: +41 61 683 77 34 www.mdpi.com mdpi.com/journal/cells cells@mdpi.com X@Cells\_MDPI