



## Epigenetic Control of the Immune System in Health and Disease

Guest Editor:

**Dr. Juan Luis Fernandez-Morera**

1. Sección de Endocrinología y Nutrición, Hospital V. Álvarez Buylla, Calle Vistalegre, 2, 33611 Mieres, Asturias, Spain  
2. Epigenética del Cáncer y Nanomedicina, Instituto de Investigación Sanitaria del Principado de Asturias (ISPA), Hospital Universitario Central de Asturias, Avda. Hospital Universitario s/n, 33011 Oviedo, Spain

Deadline for manuscript submissions:

**closed (30 September 2021)**

### Message from the Guest Editor

Dear colleagues:

The immune system is a combined functional cluster of structures, cells, and cell products that differentiate self from non-self to protect the organism from potentially pathogenic agents or substances, but also to recognize and respect own tissues. Epigenetic mechanisms are key elements for immunity to enable an adequate gene expression pattern of their cells in health and pathogenic situations that can be exposed to that also induces additional epigenetic changes to adapt.

During life, in health and disease, complex interactions among genetics, time (and aging), risk factors and deleterious exposures, system responses (adapted or not) and a little luck (or not) can be combined to induce epigenetic changes to adapt (included the immune system).

For this Special Issue, we invite manuscripts where epigenetic changes of immune system are described: ontogenic development, immune response in infections or immunosurveillance, autoimmunity, inflammation or immune senescence. The interest of these mechanisms is broad to respond unknown pathophysiological mechanisms, to identify novel therapeutic targets or diagnostic or susceptibility markers.





an Open Access Journal by MDPI

## Editor-in-Chief

### Prof. Dr. Felipe Fregni

1. Neuromodulation Center and  
Center for Clinical Research  
Learning, Spaulding  
Rehabilitation Hospital and  
Massachusetts General Hospital,  
Harvard Medical School, Boston,  
MA 02114, USA  
2. Department of Epidemiology,  
Harvard T.H. Chan School of  
Public Health, Boston, MA 02115,  
USA

## Message from the Editor-in-Chief

*Biomedicines* (ISSN 2227-9059) is an open access journal devoted to all aspects of research on human health and disease, the discovery and characterization of new therapeutic targets, therapeutic strategies, and research of naturally driven biomedicines, pharmaceuticals, and biopharmaceutical products. Topics include pathogenesis mechanisms of diseases, translational medical research, biomaterial in biomedical research, natural bioactive molecules, biologics, vaccines, gene therapies, cell-based therapies, targeted specific antibodies, recombinant therapeutic proteins, nanobiotechnology driven products, targeted therapy, bioimaging, biosensors, biomarkers, and biosimilars. The journal is open for publication of studies conducted at the basic science and preclinical research levels. We invite you to consider submitting your work to *Biomedicines*, be it original research, review articles, or developing Special Issues of current key topics.

## 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*, *PMC*, *CAPLus / SciFinder*, and other databases.

**Journal Rank:** JCR - Q1 (Pharmacology and Pharmacy) / CiteScore - Q2 (*Medicine (miscellaneous)*)

## Contact Us

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

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

[mdpi.com/journal/biomedicines](https://mdpi.com/journal/biomedicines)  
[biomedicines@mdpi.com](mailto:biomedicines@mdpi.com)  
X@Biomed\_MDPI