



## STAT3 in Carcinogenesis: Update from 1993 to Present

Guest Editors:

**Dr. Donatella Romaniello**

Department of Experimental,  
Diagnostic and Specialty  
Medicine (DIMES), University of  
Bologna, 40138 Bologna, Italy

**Dr. Ilaria Marrocco**

Department of Life Sciences and  
Public Health, Università  
Cattolica del Sacro Cuore, Rome,  
Italy

**Dr. Margherita Eufemi**

Department of Biochemical  
Sciences, Università degli Studi di  
Roma La Sapienza, Rome, Italy

Deadline for manuscript  
submissions:

**closed (30 November 2023)**

### Message from the Guest Editors

Dear Colleagues,

Signal Transducer and Activator of Transcription 3 (STAT3) is a 30-year-old protein. As a pro-inflammatory transcription factor, signal transducer, and transcription activator, it was identified in 1994. Its activation is crucial in various *diseases as chronic inflammation, cardiovascular and metabolic disorders*, and cancer. In fact, a lot of scientific publications assessed the involvement of STAT3, through both its canonical and non-canonical pathways. Its multifaceted activities are mainly ensured by post-translational modifications such as phosphorylation, acetylation, glutathionylation, etc.

This Special Issue aims to review all the scientific advances on the STAT3 protein achieved in the past 30 years focusing on current and future research on the role of the STAT3 protein, its potential inhibitors or modulators in both carcinogenesis and chemoresistance phenomenon. We hope that researchers in the field contribute with research articles, review articles, innovative hypotheses, or commentaries on STAT3's activities and regulations.

Dr. Donatella Romaniello

Dr. Ilaria Marrocco

Dr. Margherita Eufemi

*Guest Editors*





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](#), [CAPUS / SciFinder](#), and [other databases](#).

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

## Contact Us

*Biomedicines* 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/biomedicines](http://mdpi.com/journal/biomedicines)  
[biomedicines@mdpi.com](mailto:biomedicines@mdpi.com)  
[X@Biomed\\_MDPI](#)