Special Issue

Calcium Signaling and Its Dysregulation in Cancer 2.0

Message from the Guest Editor

Calcium is the common currency of differentiation and homeostasis. It is stored primarily in the endoplasmic reticulum, rationed according to need, and replenished from the extracellular milieu via store-operated calcium entry (SOCE). This currency is disbursed by the inositol triphosphate (IP3) receptor in response to diverse extracellular signals. The rate of release is governed by regulators of metabolism and proliferation, differentiation, autophagy, survival, and programmed cell death, with different outcomes depending on the strength of the signal and context. This system is fundamentally tumor-suppressive, and cancer cells must find ways to subvert it in order to exploit its many growth-promoting effects. This Special Issue invites both original manuscripts which describe novel findings and cutting-edge review articles which illustrate the many mechanisms by which cancer cells dysregulate SOCE, IP3, and ryanodine receptors; calcium transfer to mitochondria; and signaling to downstream effectors and targets to prevent cell death and enhance metabolism, mitogenesis, and metastasis.

Guest Editor

Dr. Randolph C. Elble

Department of Pharmacology, Southern Illinois University School of Medicine, Springfield, IL 62794, USA

Deadline for manuscript submissions

closed (30 June 2023)



an Open Access Journal by MDPI

Impact Factor 3.9 CiteScore 6.8 Indexed in PubMed



mdpi.com/si/134834

Biomedicines
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
biomedicines@mdpi.com

mdpi.com/journal/biomedicines





an Open Access Journal by MDPI

Impact Factor 3.9 CiteScore 6.8 Indexed in PubMed





About the Journal

Message from the Editor-in-Chief

Biomedicines (ISSN 2227-9059) is an open access iournal 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.

Editor-in-Chief

Prof. Dr. Felipe Fregni

- 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

Author Benefits

High Visibility:

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

Journal Rank:

JCR - Q1 (Pharmacology and Pharmacy) / CiteScore - Q1 (Medicine (miscellaneous))

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 2.9 days (median values for papers published in this journal in the first half of 2025).