Special Issue

Nuclear Magnetic Resonance (NMR) and Magnetic Resonance Imaging (MRI) in Biomedicine

Message from the Guest Editors

Since the discovery of nuclear magnetic resonance (NMR) signals in 1945, scientists have devoted themselves to the related fields of NMR, helping this technology become a powerful tool in research fields such as physics, chemistry, biology, geology, and medicine. Using the NMR theory, through the frequency differences caused by the gradient field over the space, the position and type of the nuclei constituting the object can be detected. As a result, the internal structure image of the object can be drawn accordingly, this theory having contributed to the revolutionary clinical diagnostic tool, magnetic resonance imaging (MRI).In the decades that followed, from the discovery of NMR phenomena to the maturity of MRI technology, the NMR research field has won six Nobel Prizes in three fields (physics, chemistry, physiology, or medicine), showing its far-reaching impact and importance. In addition to the applications in structure, NMR and MRI have also developed many applications in the field of biomedicine, areas also of interest in this Special Issue, “NMR and MRI in Biomedicine”.

Guest Editors

Dr. Dennis Hwang

1. Biomedical Translation Research Center, Academia Sinica, Taipei 115, Taiwan
2. Institute of Biomedical Sciences, Academia Sinica, Taipei 115, Taiwan

Prof. Dr. William Price

Nanoscale Organisation and Dynamics Group, School of Science and Health Campbelltown Campus, Building CA 21.G.45, Western Sydney University, Locked Bag 1797, Penrith, NSW 2751, Australia

Deadline for manuscript submissions

closed (31 December 2022)

Biomedicines

an Open Access Journal by MDPI

Impact Factor 3.9
CiteScore 6.8
Indexed in PubMed

mdpi.com/si/111043

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

mdpi.com/journal/biomedicines

Biomedicines

an Open Access Journal by MDPI

Impact Factor 3.9
CiteScore 6.8
Indexed in PubMed

mdpi.com/journal/biomedicines

MDPI

About the Journal

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.

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

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).