Special Issue

Mathematical Modeling in Biology and Life Sciences

Message from the Guest Editors

The progress in biology and life sciences over the last several decades has been revolutionary. However, many aspects of the biological mechanisms remain unclear due to complex interactions at the molecular, cellular, individual and population levels. As modern biology and life science research become more quantitative, mathematical modeling becomes increasingly important. These methods have been widely used to study complex biological processes and phenomena, test biological hypotheses, answer questions that cannot be tackled in clinical research alone, and provide both qualitative and quantitative findings. Symmetry permeates all aspects of life sciences, from biological molecules to ecosystems and biomes, which has a strict mathematical interpretation: invariance under transformation. It plays an important role in the construction and analysis of mathematical models of biological forms and processes. More evidence is beginning to show that taking an interdisciplinary approach has the potential to lead to breakthroughs in the study of biology and life sciences.

Guest Editors

Dr. Yueping Dong

Prof. Dr. Wanbiao Ma

Prof. Dr. Yasuhiro Takeuchi

Deadline for manuscript submissions

closed (31 December 2024)

Symmetry

an Open Access Journal by MDPI

Impact Factor 2.2
CiteScore 5.3

mdpi.com/si/173163

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

mdpi.com/journal/symmetry

Symmetry

an Open Access Journal by MDPI

Impact Factor 2.2
CiteScore 5.3

mdpi.com/journal/symmetry

About the Journal

Message from the Editor-in-Chief

Symmetry is ultimately the most important concept in natural sciences. It is not surprising then that very basic and fundamental research achievements are related to symmetry. For instance, the Nobel Prize in Physics 1979 (Glashow, Salam, Weinberg) was received for a unified symmetry description of electromagnetic and weak interactions, while the Nobel Prize in Physics 2008 (Nambu, Kobayashi, Maskawa) was received for the discovery of the mechanism of spontaneous breaking of symmetry, including CP symmetry. Our journal is named *Symmetry* and it manifests its fundamental role in nature.

Editor-in-Chief

Prof. Dr. Sergei Odintsov
1. ICREA, 08010 Barcelona, Spain
2. Institute of Space Sciences (IEEC-CSIC), C. Can Magrans s/n, 08193 Barcelona, Spain

Author Benefits

Open Access:

free for readers, with article processing charges (APC) paid by authors or their institutions.

High Visibility:

indexed within SCIE (Web of Science), Scopus, CAPlus / SciFinder, Inspec, Astrophysics Data System, and other databases.

Journal Rank:

JCR - Q2 (Multidisciplinary Sciences) / CiteScore - Q1 (General Mathematics)

MDPI