



Mathematical and Computational Approaches in Biology: *Symmetry*, Geometry and Conservation Laws

Guest Editors:

Dr. Federico Papa

Institute for Systems Analysis and Computer Science "A. Ruberti", National Research Council, 1900185 Rome, Italy

Prof. Dr. Pasquale Palumbo

Department of Biotechnology and Biosciences, University of Milano-Bicocca, 20126 Milan, Italy

Deadline for manuscript submissions:

closed (31 July 2023)

Message from the Guest Editors

Dear Colleagues,

Uncovering the laws and the inner mechanisms of biology is a great and fascinating challenge for the scientific community. Mathematical modelling and numerical simulations, statistical analysis, bioinformatics, allow to describe the salient aspects and the governing laws of biological systems, also elucidating the system behavior in time and space and evidencing symmetry, or symmetry breaking, in geometry and morphology. Moreover, mathematical and computational approaches allow us to reliably forecast the future evolution of the system or its response to exogenous perturbations, suggesting intervention strategies to efficiently, sometimes optimally, treat and control its behaviour.

This Special Issue is looking for innovative contributions of experienced researchers in the field of mathematical modelling and bioinformatics applied to biology. Original research papers and reviews are welcome.





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Prof. Dr. Sergei D. Odintsov

1. Institució Catalana de Recerca
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Passeig Luis Companys, 23,
08010 Barcelona, Spain
2. Institute of Space Sciences
(ICE-CSIC), C. Can Magrans s/n,
08193 Barcelona, Spain

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.

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Symmetry Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland

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