# **Special Issue**

## Biological Statistical Mechanics II

## Message from the Guest Editors

'Biological Statistical Mechanics' is strongly linked to the generalization of statistical approach for out-ofequilibrium mesoscopic systems as the background for the extension of thermodynamics for biological systems revealing specific types of criticality responsible for DNA and cell transformation. This implies we must use a sensible approach when transferring established physical concepts into biological realm, thus an 'attractor-like' behavior in cell biology will correspond to a typical gene expression profile over many thousands of genes and can be recognized in terms of Pearson correlation between different samples of the same cell kind while escaping a rigorous mathematical description in terms of differential equations. We are convinced Entropy is the right place to host scientific works that dare to pay a serious attention to biology without considering biological problems only as an occasion for interesting applications of physical concepts.

- complex networks
- non-linear dynamics
- structure and dynamics
- biological evolution
- cell biology, physiology

### **Guest Editors**

Prof. Oleg Naimark

Prof. Dr. Alessandro Giuliani

Dr. Mariano Bizzarri

## Deadline for manuscript submissions

closed (20 October 2021)



an Open Access Journal by MDPI

Impact Factor 2.1
CiteScore 5.2
Indexed in PubMed



mdpi.com/si/78635

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

mdpi.com/journal/ entropy





an Open Access Journal by MDPI

Impact Factor 2.1 CiteScore 5.2 Indexed in PubMed



## **About the Journal**

## Message from the Editor-in-Chief

The concept of entropy is traditionally a quantity in physics that has to do with temperature. However, it is now clear that entropy is deeply related to information theory and the process of inference. As such, entropic techniques have found broad application in the sciences.

Entropy is an online open access journal providing an advanced forum for the development and/or application of entropic and information-theoretic studies in a wide variety of applications. Entropy is inviting innovative and insightful contributions. Please consider Entropy as an exceptional home for your manuscript.

### Editor-in-Chief

Prof. Dr. Kevin H. Knuth

Department of Physics, University at Albany, 1400 Washington Avenue, Albany, NY 12222, USA

#### **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), Inspec, PubMed, PMC, Astrophysics Data System, and other databases.

#### Journal Rank:

JCR - Q2 (Physics, Multidisciplinary) / CiteScore - Q1 (Mathematical Physics)

