Special Issue

Mechanobiology of Cell Systems

Message from the Guest Editors

Physical forces are relevant for a significant number of biological processes across many length scales. The field of mechanobiology, which lies at the interface of engineering, physics and biology, focuses on understanding how physical forces impact cell mechanics to modify cell behavior. This area of research has benefited tremendously from the development of computational tools to predict complex cellular behaviors based on cellular energetics, together with the establishment of quantitative tools to measure and apply mechanical forces to cells and tissues. In this Special Issue, we welcome these contributions reporting the development or application of computational tools to the study of cell mechanics, particularly those related to the concepts of entropy and information theory. We also encourage interdisciplinary submissions that combine experimental results with computational modeling to characterize the mechanical response of cells. Topics of interest include but are not limited to:

- mechanotransduction;
- mechanosensing;
- cytoskeletal self-organization;
- computational modeling

Dr. Jorge G. Ferreira

Guest Editors

Dr. Jorge Ferreira
i3S and Faculty of Medicine, University of Porto, Porto, Portugal

Dr. Yekaterina A. Miroshnikova
Stadtman Tenure-Track Investigator, NIDDK/NIH, Bethesda, MD, USA

Deadline for manuscript submissions

closed (1 February 2022)

Entropy

an Open Access Journal by MDPI

Impact Factor 2.0
CiteScore 5.2
Indexed in PubMed

mdpi.com/si/84992

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

mdpi.com/journal/entropy

Entropy

an Open Access Journal by MDPI

Impact Factor 2.0
CiteScore 5.2
Indexed in PubMed

mdpi.com/journal/entropy

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)

MDPI