







an Open Access Journal by MDPI

Protein Structural Landscapes: From Structure to Function through Correlative Structural Biology

Guest Editor:

Dr. Vito Calderone

Magnetic Resonance Center and Department of Chemistry, University of Florence, 50019 Sesto Fiorentino, Italy

Deadline for manuscript submissions:

closed (1 August 2019)

Message from the Guest Editor

The determination of the structure of proteins is crucial to discover how these biomolecules work. As of today, the most common route for determining a protein structure is to crystallize it and determine its 3D structure from its X-ray diffraction data. Nevertheless, these images of the protein do not fully represent how the protein really looks like, as it is in fact dynamic and more indistinct. Moreover, some proteins are very hard if not impossible to crystallize.

Other methods, such as solution or solid-state NMR, Cryo-EM, ET or MS, give different points of view of proteins at different scales. The integration of the structural data derived from such different technologies helps understand how proteins, protein complexes or whole pathogens interact dynamically with their functional environment. This fundamental understanding will in turn allow to provide new therapeutics to tackle the main challenges of a continuously ageing society, public health and global pandemics.

This <u>Special Issue</u> will welcome papers dealing with an integration of the abovementioned techniques and showing a synergistic approach to biological problems.













an Open Access Journal by MDPI

Editors-in-Chief

Prof. Dr. Peter E. Nielsen

Department of Cellular and Molecular Medicine, Faculty of Health and Medical Sciences, University of Copenhagen, Blegdamsvej 3C, DK-2200 Copenhagen, Denmark

Prof. Dr. Lukasz Kurgan

Department of Computer Science, Virginia Commonwealth University, Richmond, VA 23284, USA

Message from the Editorial Board

Biomolecules is a multidisciplinary open-access journal that reports on all aspects of research related to biogenic substances, from small molecules to complex polymers. We invite manuscripts of high scientific quality that pertain to the diverse aspects relevant to organic molecules, irrespective of the biological question or methodology. We aim for a competent, fair peer review and rapid publication. Please look at some of the exciting work that has been published in *Biomolecules* so far. We would be delighted to welcome you as one of our authors.

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), PubMed, MEDLINE, PMC, Embase, CAPlus / SciFinder, and other databases.

Journal Rank: JCR - Q1 (*Biochemistry & Molecular Biology*) / CiteScore - Q1 (*Biochemistry*)

Contact Us