



an Open Access Journal by MDPI

Plasma Membrane Lipid Domains As a Favorable Environment for Protein:Lipid Interactions?

Guest Editor:

Dr. Donatienne Tyteca

CELL Unit, de Duve Institute & Université catholique de Louvain, 1200 Brussels, Belgium

Deadline for manuscript submissions: closed (4 October 2019)

Message from the Guest Editor

The surface of living cells contributes to the regulation of solute influx and efflux, signal transduction, lipid metabolism and trafficking. To fulfill these roles, the cell surface must be tough and plastic. This is why cell membranes exhibit such a large variety of lipids and why some lipids cluster into membrane domains [...].

One challenge is to determine how membrane biophysical properties and extrinsic factors could contribute to protein confinement in domains. Another, is to evaluate whether proteins localize in the resting state into domains that are needed for their primary activation or whether proteins are able to recruit specific lipids in their surrounding environment, forming domains with appropriate biophysical properties.

In this Special Issue, thanks to the integration of theoretical work on model membranes and living cells, we expect to shed new light on various aspects of protein activity through their confinement in, or exclusion from, plasma membrane domains.









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

Biomolecules Editorial Office MDPI, St. Alban-Anlage 66 4052 Basel, Switzerland Tel: +41 61 683 77 34 www.mdpi.com mdpi.com/journal/biomolecules biomolecules@mdpi.com X@Biomol_MDPI