



an Open Access Journal by MDPI

# Liposomes as Membrane Models in Drug-Lipid Interactions

Guest Editor:

#### Dr. Carla Matos

FP-I3ID (Instituto de Investigação, Inovação e Desenvolvimento Fernando Pessoa), FP-BHS (Biomedical and Health Sciences), Universidade Fernando Pessoa, Praça 9 de Abril, 349, 4249-004 Porto, Portugal

Deadline for manuscript submissions: 20 March 2025



mdpi.com/si/155406

### Message from the Guest Editor

The pharmacokinetics and pharmacodynamics of a pharmacologically active molecule in the human body presuppose, in some phases, the interaction of these molecules with cell membranes. Drug absorption is generally achieved at the expense of molecules migrating across the lipid bilayer, as well as interaction with intramembrane or intracellular receptors that can condition the mechanism of action.

In this context, studies of the interaction of molecules with the membrane can be performed using liposomes, as these lipid structures have a membrane similar to that of cells and whose composition and complexity can be easily modulated. Natural biological membranes have a complex structure, whereas lipid-based membrane models offer a simple and useful alternative for studying drug-membrane interactions.

This Special Issue intends to make a collection of papers in this field, focusing both on liposomes of different compositions and manufacturers used as membrane models and on the techniques used to study these interactions. It is expected that the conclusions are of interest to the scope of Pharmacology and the Pharmaceutical Industry and that future perspectives will also be discussed.







an Open Access Journal by MDPI

## **Editor-in-Chief**

#### Prof. Dr. Maurizio Battino

Department of Odontostomatologic and Specialized Clinical Sciences, Sez-Biochimica, Faculty of Medicine, Università Politecnica delle Marche, Via Ranieri 65, 60100 Ancona, Italy

### Message from the Editor-in-Chief

The International Journal of Molecular Sciences (*IJMS*, ISSN 1422-0067) is an open access journal, which was established in 2000. The journal aims to provide a forum for scholarly research on a range of topics, including biochemistry, molecular and cell biology, molecular biophysics, molecular medicine, and all aspects of molecular research in chemistry. *IJMS* publishes both original research and review articles, and regularly publishes special issues to highlight advances at the cutting edge of research. We invite you to read recent articles published in *IJMS* and consider publishing your next paper with us.

### **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, PMC, MEDLINE, Embase, CAPlus / SciFinder, and other databases.

**Journal Rank:** JCR - Q1 (Biochemistry and Molecular Biology) / CiteScore - Q1 (Inorganic Chemistry)

# **Contact Us**

International Journal of Molecular Sciences Editorial Office MDPI, Grosspeteranlage 5 4052 Basel, Switzerland Tel: +41 61 683 77 34 www.mdpi.com mdpi.com/journal/ijms ijms@mdpi.com X@IJMS\_MDPI