Special Issue

Overcoming Physiological Barriers Using Lipid Nanosystems

Message from the Guest Editors

The delivery of therapeutics using nanocarrier systems is an interdisciplinary area of study. Among the many nanocarrier systems, lipid-based nanosystems are recognized as promising commercial nanotherapeutic delivery systems due to their higher biocompatibility and lower toxicity. Currently, the production of nanomedicines consisting of lipid nanosystems that can supply therapeutic agents to a proper place at an appropriate time is an attractive field of research in pharmaceutical development. One of the main challenges to the development of nanomedicines is overcoming physiological barriers. A variety of approaches have been developed to overcome the barriers, including the rational development of finely tuned formulations and targeting and triggering strategies, to address complex and challenging issues in the transport of therapeutic agents across several physiological barriers. This Special Issue seeks to present a collection of studies describing recent advances in the development of lipid nanosystems suited for the delivery of therapeutic agents and focused on overcoming physiological barriers. Dr. Carla M. Lopes

Guest Editors

Dr. Carla Martins Lopes

1. FP-BHS—Biomedical and Health Sciences Research Unit, FP-I3ID—Instituto de Investigação, Inovação e Desenvolvimento, Faculty of Health Science, Fernando Pessoa University, 4200-150 Porto, Portugal 2. Associate Laboratory I4HB—Institute for Health and Bioeconomy, Faculty of Pharmacy, University of Porto, 4050-313 Porto, Portugal 3. UCIBIO—Applied Molecular Biosciences Unit, MedTech—Laboratory of Pharmaceutical Technology, Faculty of Pharmacy, University of Porto, 050-313 Porto, Portugal

4. RISE—Health, Faculty of Health Sciences, Fernando Pessoa University, Fernando Pessoa Teaching and Culture Foundation, Rua Carlos da Maia 296, 4200-150 Porto, Portugal

Dr. Marlene Lucio

- CF-UM-UP, Centro de Física das Universidades do Minho e Porto, Departamento de Física da Universidade do Minho, 4710-057 Braga, Portugal
- 2. CBMA, Centro de Biologia Molecular e Ambiental, Departamento de Biologia, Universidade do Minho, 4710-057 Braga, Portugal



Pharmaceutics

an Open Access Journal by MDPI

Impact Factor 5.5 CiteScore 10.0 Indexed in PubMed



mdpi.com/si/57149

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

mdpi.com/journal/ pharmaceutics





an Open Access Journal by MDPI

Impact Factor 5.5 CiteScore 10.0 Indexed in PubMed



About the Journal

Message from the Editor-in-Chief

Pharmaceutics (ISSN 1999-4923) is an online open access journal on the science and technology of pharmaceutics and biopharmaceutics. The scientific community, the wider community and the general public have unlimited and free access to the content as soon as a paper is published; this open access to your research ensures your findings are shared with the widest possible audience. Please consider publishing your impressive work in this high quality journal. We would be pleased to welcome you as one of our authors.

Editor-in-Chief

Prof. Dr. Patrick J. Sinko

Department of Pharmaceutics, Ernest Mario School of Pharmacy, Rutgers University, Piscataway, NJ 08854, USA

Author Benefits

High Visibility:

indexed within Scopus, SCIE (Web of Science), PubMed, PMC, Embase, CAPlus / SciFinder, and other databases.

Journal Rank:

JCR - Q1 (Pharmacology and Pharmacy) / CiteScore - Q1 (Pharmaceutical Science)

Rapid Publication:

manuscripts are peer-reviewed and a first decision is provided to authors approximately 14.9 days after submission; acceptance to publication is undertaken in 3.3 days (median values for papers published in this journal in the first half of 2025).

