

Special Issue

Innovative Methods to Optimize Prediction of Oral Drug Bioavailability: More than a Gut Feeling

Message from the Guest Editor

The optimization of in vitro and in silico methods for studying drug intestinal transport and metabolism is critical for predicting the oral bioavailability of therapeutic drugs. There are research findings that 3D intestinal organoids can be maintained long-term in vitro and develop into fully differentiated epithelial cells. Data generated in these systems could help in refining existing in silico models for optimizing the prediction of oral permeability, while assessing the impact of dosage forms, drug–drug interactions, and pharmacogenetic variability on drug–exposure–response relationships. This Special Issue of *Pharmaceutics* invites papers focusing on the development of novel 3D models (either static systems such as organoids, or dynamic microfluidic organ-on-a-chip technologies) to improve the prediction of oral drug bioavailability for small molecules and biologics. This Issue will also welcome research articles discussing spontaneous animal models to characterize the impact of disease on drug absorption, as well as innovative computational models for in vitro to in vivo extrapolations.

Guest Editor

Dr. Jonathan Paul Mochel

Department of Biomedical Sciences, SMART Pharmacology and Translational Medicine, College of Veterinary Medicine, Iowa State University, Ames, IA, USA

Deadline for manuscript submissions

closed (20 October 2021)



Pharmaceutics

an Open Access Journal
by MDPI

Impact Factor 5.5
CiteScore 10.0
Indexed in PubMed



mdpi.com/si/64334

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

[mdpi.com/journal/
pharmaceutics](https://mdpi.com/journal/pharmaceutics)





Pharmaceutics

an Open Access Journal
by MDPI

Impact Factor 5.5
CiteScore 10.0
Indexed in PubMed



[mdpi.com/journal/
pharmaceutics](https://mdpi.com/journal/pharmaceutics)



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).