

Special Issue

The Structure and Function of Membrane-Binding Peptides

Message from the Guest Editor

There are several classes of peptides, including antimicrobial and cell-penetrating peptides, which are notable for their interactions with lipid bilayers. These peptides can exhibit drastic conformational changes as they transition from solution to bilayer environments, and their effects range from passive diffusion through the bilayer to large-scale bilayer perturbations, including the formation of pores and cell lysis. Due to these characteristics, membrane-binding peptides are increasingly being investigated for their relation to human disease and potential use as therapeutics. We invite you to submit an article that furthers our understanding of the structure–function relationship of membrane-binding peptides. Ultimately, we seek articles that enrich our understanding of the underlying physicochemical mechanisms of action of these peptides through experimental or molecular simulations. In this Special Issue, we welcome original research articles and reviews. I look forward to receiving your contributions.

Guest Editor

Dr. Christopher Lockhart

School of Systems Biology, George Mason University, Manassas, VA 20110, USA

Deadline for manuscript submissions

closed (31 December 2024)



Biology

an Open Access Journal
by MDPI

Impact Factor 3.5
CiteScore 7.4
Indexed in PubMed



mdpi.com/si/194698

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

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





Biology

an Open Access Journal
by MDPI

Impact Factor 3.5
CiteScore 7.4
Indexed in PubMed



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



About the Journal

Message from the Editorial Board

A major strength of biological science is the diversity of approaches that biological scientists apply to their research problems. *Biology* reflects this diversity and brings together studies employing the varied experimental and theoretical approaches that are fueling biological discovery. *Biology*, the journal, is a fully peer-reviewed publication with a rapid and economical route to open access publication and is listed on PubMed. All articles are peer-reviewed and the editorial focus is on determining that the work is scientifically sound rather than trying to predict its future impact.

Editors-in-Chief

Prof. Dr. Jukka Finne

Research Programme in Molecular and Integrative Biosciences, Faculty of Biological and Environmental Sciences, University of Helsinki, P.O. Box 56, FI-00014 Helsinki, Finland

Prof. Dr. Andrés Moya

Integrative Systems Biology Institute, University of Valencia and CSIC, 46980 Valencia, Spain

Author Benefits

High Visibility:

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

Journal Rank:

JCR - Q1 (Biology) / CiteScore - Q1 (General Agricultural and Biological Sciences)

Rapid Publication:

manuscripts are peer-reviewed and a first decision is provided to authors approximately 16.8 days after submission; acceptance to publication is undertaken in 2.9 days (median values for papers published in this journal in the second half of 2025).