

Special Issue

Barrier Function of Skin and Oral Mucosa

Message from the Guest Editor

Skin and oral mucosa have superficial permeability barriers that protect underlying viable tissue. Due to their physical properties, these barriers limit penetration of harmful substances. In skin, stratum corneum (SC) is produced. SC cells are flat and are bounded by a cornified envelope (CE) consisting of polymerized proteins. The outer surface of the CE is coated by a monolayer of Ω -hydroxyceramides (CLE). Between the CLEs of adjacent cell layers is a mixture of ceramides, cholesterol and fatty acids. The CLE and the intercellular lipids form multilamellar structures that determine the permeability of the skin. In oral mucosa, the gingiva and hard palate produce SC. These regions do not have CLE, and intercellular lipid levels are lower. Buccal regions and the underside of the tongue are nonkeratinized. These regions do not produce SC. There is some evidence that lipid structures within the intercellular spaces may provide the barrier. The purpose of this Special Issue is to present the current perspectives on the barrier function of skin and oral mucosa. Original research articles and reviews are welcome.

Guest Editor

Prof. Dr. Philip W. Wertz

Dows Institute for Dental Research, College of Dentistry, University of Iowa, Iowa City, IA 52240, USA

Deadline for manuscript submissions

closed (31 May 2021)



International Journal of Molecular Sciences

an Open Access Journal
by MDPI

Impact Factor 4.9
CiteScore 9.0
Indexed in PubMed



mdpi.com/si/67682

*International Journal of
Molecular Sciences*
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
ijms@mdpi.com

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





International Journal of Molecular Sciences

an Open Access Journal
by MDPI

Impact Factor 4.9
CiteScore 9.0
Indexed in PubMed



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



About the Journal

Message from the Editor-in-Chief

The *International Journal of Molecular Sciences (IJMS)* 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, and molecular biophysics. *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.

Editor-in-Chief

Prof. Dr. José L. Quiles
Department of Physiology, Institute of Nutrition and Food Technology
"Jose Mataix", Biomedical Research Center, University of Granada,
Avda. Conocimiento s/n, 18100 Armilla, Granada, Spain

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, CAPus / SciFinder, and other databases.

Journal Rank:

JCR - Q1 (Biochemistry and Molecular Biology) / CiteScore - Q1 (Organic Chemistry)