

## Special Issue

# Physiology of Lymph Vessels: Structure, Function, Modelling, and Clinical Perspectives

### Message from the Guest Editor

Lymphatic vessels provide a unique circulatory system offering interstitial and serosal liquids a drainage route back into the blood stream. Lymphatic vessels exploit two different pumping mechanisms, which rely on external compression and/or distention forces exerted by the surrounding tissues, or by intrinsic, spontaneous contractile activity of the lymphatic musculature of the wall comprising lymphatic vessels. Parietal and intraluminal lymphatic valves cooperate with these two pumping mechanisms to attain lymph drainage and transport. The knowledge of lymphatic vessels' physiology has lagged behind the wealth of data regarding blood circulation, despite lymphatics being a prominent actor in maintaining the fluid volume homeostasis in tissues and serosal cavities. This Special Issue will highlight the most relevant and latest findings on lymphatic physiology, anatomy and histology, as well as on new, in vivo or ex vivo least-invasive lymphatic imaging techniques, numerical modelling of lymphatic vessel function and clinical perspectives on how to translate this knowledge into clinical approaches to deal with the lymphatic drainage defect.

---

### Guest Editor

Dr. Andrea Moriondo

Department of Medicine and Technological Innovation (DIMIT),  
Università degli Studi dell'Insubria, 21100 Varese, Italy

---

### Deadline for manuscript submissions

closed (31 May 2023)



## Biology

---

an Open Access Journal  
by MDPI

---

Impact Factor 3.5  
CiteScore 7.4  
Indexed in PubMed



[mdpi.com/si/125902](https://mdpi.com/si/125902)

*Biology*  
Editorial Office  
MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland  
Tel: +41 61 683 77 34  
[biology@mdpi.com](mailto: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, CAPus / 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 17.4 days after submission; acceptance to publication is undertaken in 2.5 days (median values for papers published in this journal in the first half of 2025).