

Special Issue

Reviews in Actin Cytoskeletal Dynamics

Message from the Guest Editors

While the last ~75 years of research into the dynamic structure of actin and the multitude of actin binding proteins that regulate it has significantly advanced the field's understanding of actin, much still remains to be learned in these areas. Similarly, how actin dynamics impact life by regulating cellular structure, migration, adhesion, mechanotransduction and morphogenesis remain active areas of investigation. To probe the regulation and function of actin dynamics, quantitative techniques to assess actin in vitro and tools to visualize actin dynamics within tissues and organisms have been developed. In the last two decades, it has been well established that actin not only functions within the cytoskeleton but translocates to the nucleus where it has a range of activities. However, much remains to be learned about the structure, dynamics, and regulation of nuclear actin. This Special Issue will be a place for reviews on the field's current understanding of actin dynamics, actin binding proteins, the in vivo functions of actin—both in the cytoplasm and the nucleus, and the technologies used to study actin.

Guest Editors

Dr. Tina L. Tootle

Anatomy and Cell Biology Department, University of Iowa Carver College of Medicine, Iowa City, IA 52242, USA

Dr. Margot E. Quinlan

Department of Chemistry and Biochemistry, University of California Los Angeles, Los Angeles, CA 90095, USA

Deadline for manuscript submissions

closed (31 March 2022)



Biology

an Open Access Journal
by MDPI

Impact Factor 3.5
CiteScore 7.4
Indexed in PubMed



mdpi.com/si/62532

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, 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).