Special Issue

RNA Regulation in Cell-Type Development and Disease

Message from the Guest Editor

The wide variety of cell and tissue types found in multicellular organisms are defined by distinct patterns of gene expression. Beyond transcription, we have begun to realize that different cell and tissue types employ divergent patterns of RNA regulation directed by RNA-binding proteins. This results in distinct patterns of alternative splicing, mRNA localization, and transcript stability that ultimately fine tunes cell-type-specific protein expression. The disruption of RNA regulation, notably of alternative splice isoform expression, leads to a wide variety of diseases from cardiomyopathy to myotonic dystrophy and spinal motor atrophy, highlighting the importance of this cellular process. There are, unfortunately, vast gaps in our understanding of RNA regulation. Only a small portion of RNA-binding proteins are characterized in an organism, and a wide array of proteins without canonical RNA-binding domains may in fact bind to RNA. This Special Issue welcomes the submission of articles and reviews exploring the role of RNA regulation in tissue and celltype-specific development and providing insight to any of the above issues.

Guest Editor

Dr. Maria Spletter

Ludwig-Maximilians-Universität München, Munich, Germany

Deadline for manuscript submissions

closed (29 December 2021)



Biology

an Open Access Journal by MDPI

Impact Factor 3.5
CiteScore 7.4
Indexed in PubMed



mdpi.com/si/48913

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

mdpi.com/journal/ biology





Biology

an Open Access Journal by MDPI

Impact Factor 3.5 CiteScore 7.4 Indexed in PubMed





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 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).

