



biology



an Open Access Journal by MDPI

RNA Regulation in Cell-Type Development and Disease

Guest Editor:

Dr. Maria Spletter

Ludwig-Maximilians-Universität
München, Munich, Germany

Deadline for manuscript
submissions:

closed (29 December 2021)

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 cell-type-specific development and providing insight to any of the above issues.



mdpi.com/si/48913

Special Issue



an Open Access Journal by MDPI

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

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.

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, PubAg, CAPlus / SciFinder, and other databases.

Journal Rank: JCR - Q2 (*Biology*) / CiteScore - Q1 (*General Agricultural and Biological Sciences*)

Contact Us

Biology Editorial Office
MDPI, St. Alban-Anlage 66
4052 Basel, Switzerland

Tel: +41 61 683 77 34
www.mdpi.com

mdpi.com/journal/biology
biology@mdpi.com
[X@Biology_MDPI](https://twitter.com/Biology_MDPI)