



biology



an Open Access Journal by MDPI

Regulation of Mobile Genetic Elements at the Molecular Level

Guest Editor:

Dr. Silke Jensen

GReD, Université Clermont
Auvergne, CNRS, INSERM, Faculté
de Médecine, 63000 Clermont-
Ferrand, France

Deadline for manuscript
submissions:

closed (31 December 2021)

Message from the Guest Editor

Mobile genetic elements can have devastating or, on the contrary, beneficial effects on genomes. They can create disorders but they also play an essential role in the fluidity of genomes and in evolution. It is therefore extremely important to elucidate the regulatory mechanisms controlling mobile genetic elements in all their aspects at the molecular level.

A number of different regulatory systems exist and operate in different organisms and in different tissues. In the metazoans germline, small RNAs interacting with PIWI family proteins (piRNAs) and small interfering RNAs (siRNAs) are key components of the pathways controlling transposable elements. Chromatin remodeling leads to transcriptional silencing of mobile elements. Truncated proteins derived from transposable elements themselves can control mobility as in the case of P elements in *Drosophila*. Somatic silencing mechanisms may be totally different from germline mechanisms in the same organism. Bringing together different areas of research in this Special Issue will help to expand our knowledge of the molecular mechanisms controlling mobile genetic elements in all their diversity.



mdpi.com/si/58646

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 - Q1 (Biology) / CiteScore - Q1 (General Agricultural and Biological Sciences)

Contact Us

Biology Editorial Office
MDPI, Grosspeteranlage 5
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)