

## Special Issue

# Telomeres in Development, Senescence and Genome Instability

### Message from the Guest Editor

Telomere biology, as a special area of biology, was brought to light in 1971–1973 by the brilliant prediction of Alexey Olovnikov (1936–2022) about the under-replication of the ends of linear chromosomes. In his telomeric theory of aging, Alexey Olovnikov also determined the key role of telomeres in various fundamental processes, such as cell death, cancer, and aging. Indeed, telomere functions are closely linked to many cellular processes, in particular through the telomere signalling mechanisms, although their molecular basis remains poorly understood. Telomere shortening and telomere dysfunction are the hallmarks of cellular senescence, aging and oncogenesis, highlighting the importance of telomere state in genome stability. The aim of this Special Issue is to bring together research and methodological articles, reviews and opinions of the authors studying the diverse and fascinating field of telomere biology. Topics include, but are not limited to, the following: Telomere disorders and cell death; Telomeres and genome stability; Epigenetics of telomeres in development and aging; Telomeres in aging and senescence.

### Guest Editor

Dr. Alla Kalmykova

Head of Laboratory of Developmental Epigenetics, Koltzov Institute of Developmental Biology of RAS, 119334 Moscow, Russia

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Editorial Office  
MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland  
Tel: +41 61 683 77 34  
[ijms@mdpi.com](mailto:ijms@mdpi.com)

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The International Journal of Molecular Sciences (*IJMS*, ISSN 1422-0067) is an open access journal, which was established in 2000. The journal aims to provide a forum for scholarly research on a range of topics, including biochemistry, molecular and cell biology, molecular biophysics, molecular medicine, and all aspects of molecular research in chemistry. *IJMS* publishes both original research and review articles, and regularly publishes special issues to highlight advances at the cutting edge of research. We invite you to read recent articles published in *IJMS* and consider publishing your next paper with us.

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### Editor-in-Chief

Prof. Dr. Maurizio Battino

Department of Odontostomatologic and Specialized Clinical Sciences,  
Sez-Biochimica, Faculty of Medicine, Università Politecnica delle  
Marche, Via Ranieri 65, 60100 Ancona, Italy

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