

# Special Issue

## Telomeres and Telomerase

### Message from the Guest Editor

The importance of telomeres and telomerase has been acknowledged since Elizabeth Blackburn, Carol Greider, and Jack Szostak won the Nobel prize in physiology in 2009. Telomeres, the end parts of linear chromosomes, together with their cognate proteins, mask the ends of chromosomes from being identified as double strand breaks that otherwise would be repaired by DNA repair mechanisms, thus conferring genomic stability. In addition, they serve as mitotic clocks, as they are getting gradually shorter with each cell division, until they reach a critical length. When this process is perturbed, the cells continue to divide, and telomeres become dysfunctional, allowing the accumulation of mutations, some of which may be cancerous. If some of these cells upregulate telomerase, telomeres will not be further shortened, and the cancer clone will be perpetuated. Telomerase is considered the hallmark of cancer, since it is specific mainly for cancer cells and is vital for their endless replicative potential.

In this Special Issue, we welcome original studies and review articles presenting novel findings at the basic and translational levels of research in this field.

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### Guest Editor

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### Deadline for manuscript submissions

closed (31 January 2021)



## Methods and Protocols

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## About the Journal

### Message from the Editor-in-Chief

*Methods and Protocols* (ISSN 2409-9279) is an open access journal devoted to the publication of new procedural approaches and cutting-edge methodological developments. The ultimate objective of this new forum of scientific communication is to provide researchers with an indispensable tool, enabling better use of the latest scientific technologies. With a broad and totally interdisciplinary focus, *Methods and Protocols* was established with the objective of facilitating cross-fertilization and cross-talk in the scientific arena. Methods and protocols in Life Sciences, Chemistry, Biomedical Sciences, Engineering, and in their intersections such as Biotechnology and Nanotechnology will constitute the core of the journal. However, we anticipate that other fundamental disciplines such as Physics or Geology will be rapidly incorporated.

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### Editor-in-Chief

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