

Special Issue

Whole Genome Amplification

Message from the Guest Editor

The development of whole-genome amplification (WGA) techniques has opened up new avenues for genetic analysis and genome research, in particular by facilitating the genome-wide analysis of only few or even single cells. Applications comprise preimplantation genetic diagnostics, cell-based non-invasive prenatal testing, cytogenetic analysis of single cells derived by liquid biopsy, analysis of genetic heterogeneity in populations of multiple cells, the study of meiotic recombination at the level of single sperm cells, and the forensic DNA analysis of limited trace material. In general aiming at a uniform amplification of the complete genome of interest, the various WGA methods display specific strengths as well as shortcomings, and thus the choice of method requires thorough consideration in terms of suitability for a particular source of genomic DNA and type of downstream analysis. This Special Issue aims to provide an overview of the various technical principles of WGA and their applications by including review articles as well as original works reflecting the range of analytical applications and current developments, and stimulating future research.

Guest Editor

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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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