



Cell Division: A Focus on Molecular Mechanisms

Guest Editors:

Dr. Stefano Sechi

National Research Council
(CNR)–Institute of Molecular
Biology and Pathology (IBPM),
c/o Department of Biology and
Biotechnology “Charles Darwin”,
Sapienza University of Rome,
00185 Roma, Italy

Dr. Antonino Colanzi

Institute of Experimental
Endocrinology and Oncology “G.
Salvatore” (IEOS), National
Research Council (CNR), 80131
Naples, Italy

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Message from the Guest Editors

Cells divide and reproduce via two types of cell division processes: mitosis and meiosis. Both processes require a highly regulated and carefully orchestrated sequence of events that induce remodeling of both the cytoskeleton and cell membranes. These changes ensure the formation of new cellular structures, such as the spindle apparatus necessary for correct chromosome segregation, and the disassembly/remodeling of pre-existing structures, such as the endoplasmic reticulum, Golgi apparatus and nuclear envelope later distributed and reformed in the cells that arise. Cytoplasmic material and smaller organelles, such as mitochondria, must also be distributed correctly within daughter cells. The failure of these mechanisms is the basis of numerous human pathologies such as cancer. Therefore, we welcome original papers and review articles to this Special Issue, with a focus on recent studies that disseminate greater knowledge of cell division and the molecular mechanisms that regulate this process to better understand its role in pathologies.





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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

Message from the Editor-in-Chief

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*International Journal of Molecular
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