



The Contribution and Application of Molecular Biology in the Applied Biosciences — Focusing on Medicine, Biomaterials and Tissue Engineering Fields

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Message from the Guest Editors

The rapid development of new approaches and techniques in the area of molecular biology has led to new insights in the field of medicine for clinical applications and biomaterial science for tissue engineering approaches. More specifically, investigative methods of molecular biology have made inroads into uncovering fundamental medical processes that are revealed when we fully understand their molecular details. Cloning tools, CRISPR/Cas9 technology, DNA arrays and next-generation sequencing are some of the molecular biology tools used in in guiding drug discovery and development diagnostic methods. Additionally, as molecular biologists progressively discover the pathogenetic mechanisms that underly several entities, evidence regarding the correct combination of extracellular and intracellular chemical gradients, cellular attachments complexes and other stimuli required to activate tissue regeneration is revealed. The aim of this Special Issue is to gather all the relevant new insights and updates from the field of medicine, biomaterials and tissue engineering under the prism of molecular biology tools.

