Special Issue

Advances in Molecular Cytogenetics Volume II

Message from the Guest Editor

Since its origin many decades ago, classical cytogenetics has been a crucial tool in the life sciences. During this time, technical advancements have been made and applied in both research and diagnostics. In medicine, the obtained results are universally well-known and appreciated. Cellular biology improved our knowledge on the nucleus, nucleolus, chromosomes, and chromatin, and the advent of molecular cytogenetics confirmed the necessity of continuing these efforts to deepen our knowledge of the molecular bases of genetic diseases. The aim of this Special Issue is to describe the state of the art of cytogenetics and cytogenomics, as well as identify their future evolutions. The main topics that will be covered are:

- The role of conventional cytogenetics in the cytogenomic era;
- Metaphase and/or interphase FISH in the cytogenomic era;
- The role of chromosomal microarrays in prenatal and postnatal diagnoses of structural abnormalities;
- Detection and clinical interpretation of copy number variants:
- Next-generation sequencing in cytogenetics;
- Optical genome mapping in cytogenetics;
- Three-dimensional genomics and chromosomal disorders;

Guest Editor

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Message from the Editor-in-Chief

Biomedicines (ISSN 2227-9059) is an open access iournal devoted to all aspects of research on human health and disease, the discovery and characterization of new therapeutic targets, therapeutic strategies, and research of naturally driven biomedicines, pharmaceuticals, and biopharmaceutical products. Topics include pathogenesis mechanisms of diseases, translational medical research, biomaterial in biomedical research, natural bioactive molecules, biologics, vaccines, gene therapies, cell-based therapies, targeted specific antibodies, recombinant therapeutic proteins, nanobiotechnology driven products, targeted therapy, bioimaging, biosensors, biomarkers, and biosimilars. The journal is open for publication of studies conducted at the basic science and preclinical research levels. We invite you to consider submitting your work to Biomedicines, be it original research, review articles, or developing Special Issues of current key topics.

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