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**Updates on "Cancer Genomics and Epigenomics"**

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#### Abstract

The field of "Cancer Genomics and Epigenomes" has been widely investigated for their involvement in cancer in order to understand the basic processes of different malignancies. The aggregation of genetic and epigenetic alterations also displays a wide range of heterogeneity making it quite necessary to develop personalized treatment strategies. The complex interplay between deoxyribonucleic acid methylation and chromatin dynamics in malignant cells one of the major epigenetic mechanisms that lead to gene activation and repression. Hence, each tumor needs to be fully characterized in order to satisfy the ideas of personalized treatment strategies. The present article addresses various aspects of genome characterization tools and their potentials role in the field of cancer genomics and epigenomics.

**Key words:** Genetics; Epigenetics; Chromatin; Cancer; Copy number variations; Transcription; Histone-modifications

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**Cited by:** 54

**Author:** Fabricio F Costa

**Publish Year:** 2010

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