Special Issue

Epigenetics and Molecular Genetics of Cancer

Message from the Guest Editor

Cancer results from the disruption of the balance of cell growth and cell death that is driven by genetic and epigenetic alterations. The molecular profiling of cancer, especially after the emergence of Next-Generation Sequencing technologies, was a huge leap in understanding carcinogenesis, the development of biomarkers for early diagnosis and the development of targeted treatments. Since most cancers are sporadic, we are still far from understanding the whole complexity of the molecular mechanisms, genes and epigenetic regulators that play a role in cancer development and that have the potential to be exploited as biomarkers for diagnosis, prognosis, personalized therapy targets and the prediction of treatment response. Another important challenge is to comprehend the role of environmental factors in the modulation of the epigenome and how we can use this knowledge in cancer prevention. The aim of this Special Issue of IJMS is to assemble the most relevant works on the epigenetics and molecular genetics mechanisms involved in cancer development, and on how these mechanisms are modulated and can be exploited for the development of more effective treatment strategies.

Guest Editor

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Message from the Editor-in-Chief

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Editor-in-Chief

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