





an Open Access Journal by MDPI

# **Linking Genomic Changes with Cancer in the NGS Era**

Guest Editor:

#### Dr. Paula Paulo

Cancer Genetics Group, IPO Porto Research Center (CI-IPOP), Portuguese Oncology Institute of Porto (IPO Porto), 4200-072 Porto, Portugal

Deadline for manuscript submissions:

closed (31 March 2023)

## Message from the Guest Editor

The developing of the next-generation sequencing (NGS) technology has opened a new era in the identification of disease-causing genetic changes. The "translationability" of the identified changes is complex, and the establishment of a new driver gene/variant constitutes the NGS-based genetic screening bottleneck. This is particularly true in cancer, where only a very small fraction of the 10-20% of the cancers associated with familial aggregation have a known underlying genetic cause. Moreover, the profile of genomic changes of the 80-90% of the cancers arising sporadically is highly heterogeneous, making difficult to distinguish driving, secondary and progression-associated genomic variation.

We appreciate the work highlighting or discarding the identification of new genes/variants as a cause of cancer development or progression. Evidences may include case-control studies, segregation analysis, gene/variant specific gene editing, protein structure analysis, functional studies, or other approaches considered relevant for validation of a gene-disease association.













an Open Access Journal by MDPI

## **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**

The International Journal of Molecular Sciences (*IJMS*, ISSN 1422-0067) is an open access journal, which was established in 2000. The journal aims to provide a forum for scholarly research on a range of topics, including biochemistry, molecular and cell biology, molecular biophysics, molecular medicine, and all aspects of molecular research in chemistry. *IJMS* publishes both original research and review articles, and regularly publishes special issues to highlight advances at the cutting edge of research. We invite you to read recent articles published in *IJMS* and consider publishing your next paper with us.

## **Author Benefits**

**Open Access:** free for readers, with article processing charges (APC) paid by authors or their institutions.

**High Visibility:** indexed within Scopus, SCIE (Web of Science), PubMed, PMC, MEDLINE, Embase, CAPlus / SciFinder, and other databases.

**Journal Rank:** JCR - Q1 (Biochemistry and Molecular Biology) / CiteScore - Q1 (Inorganic Chemistry)

### **Contact Us**