Special Issue

AI and Machine Learning in Cancer Genomics

Message from the Guest Editor

The incorporation of artificial intelligence (AI) and Machine Learning (ML) into the field of cancer genomics has changed our approach toward analyzing and interpreting intricate genomic data. This, in turn, has aided in the understanding of the processes related to the inception, evolution, and prognosis of cancer. Advanced AI techniques, including deep learning and sophisticated models, can help to unravel multidimensional genomic data and tailor treatments for individuals based on their unique disease patterns, which were previously thought to be impossible. Some of the most advanced cancer AI solutions have breathtaking usefulness, and the study of mutational signatures is one of them. Using AI to interpret these complex patterns against the backdrop of different mutagenic mechanisms greatly enhances their clinical value. This special issue aims to illustrate works that combine AI/ML with cancer genomics. We encourage the submission of works that put forward novel computational techniques, the use of machine learning on genomic projects, and the application of observational studies where AI methods have already been placed into practice in a medical field.

Guest Editor

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Message from the Editor-in-Chief

Genes is central to our understanding of biology, and modern advances such as genomics and genome editing have maintained genetics as a vibrant, diverse and fast-moving field. There is a need for good quality, open access journals in this area, and the *Genes* team aims to provide expert manuscript handling, serious peer review, and rapid publication across the whole discipline of genetics. Starting in 2010, the journal is now well established and recognised. Why not consider *Genes* for your next genetics paper?

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