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## When Genes Meet Artificial Intelligence and Machine Learning

Guest Editor:

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Deadline for manuscript submissions:

**closed (20 April 2024)**

### **Message from the Guest Editor**

In recent years, artificial intelligence (AI) and machine learning (ML) have gained significant attention, with publications doubling every 2.5 years, and have gained significant attention in the field of genetics.

The aim of this Special Issue of Genes is to showcase the latest advances in the field of machine learning and its application in gene research. This issue will provide a platform for researchers to share their experiences, successes, and challenges in the use of machine learning algorithms to analyze and interpret genetic data.

One example of the successful application of machine learning in gene research is the PlasmidHunter tool by our guest editor. PlasmidHunter is a machine learning-based tool that predicts the type of DNA molecules in bacterial genomes using sequence data. It achieves an impressive accuracy of 96% and has been shown to outperform traditional methods for plasmid detection.

We invite researchers to submit original research articles, reviews, and perspectives that demonstrate the application of machine learning techniques in gene research.



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# Special Issue



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## Editor-in-Chief

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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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