



## Deep Learning and Machine Learning in Bioinformatics

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### Message from the Guest Editors

In recent years, deep learning has been spotlighted as a highly active research field with great success in various machine learning communities, such as image analysis, speech recognition, and natural language processing; now, its promising potential is being actively discussed in the field of biomedicine. In particular, a dramatically increasing number of deep-learning-based approaches have been proposed in biomedical image and signal processing. However, the application of deep learning in other biomedical areas, such as genomics and computational biology, has been rather limited due to the difficulty of definition and interpretation of deep learning architecture. Moreover, there are still many challenging open problems in deep learning that need to be solved to allow its active use in the field of bioinformatics.

In this Special Issue, we envision that the application of deep learning and novel machine learning methods to biological problems will provide practical guides and useful solutions to improve predictive performance and enhance our understanding of biological mechanisms of target diseases.





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