Special Issue

Machine Learning in Metabolic Diseases

Message from the Guest Editor

Machine learning (ML) concerns computer algorithms that improve their performance by learning from large sets of data. As a subdiscipline of artificial intelligence, ML has been developed and applied in analyzing complex data such as metabolomics to predict, identify and validate biomarkers / risk factors of metabolic diseases. The key steps of ML includes 1) data gathering and pre-processing; 2) model selection, training and testing; and 3) prediction, inference and applications. Large and high quality data enable good performance for predicting disease risk to develop efficient personalized diagnosis and therapy. This Special Issue focuses on ML in metabolic diseases. Topics include studies aimed at developing and / or using ML in the following areas:

- Collection of data and data pre-processing;
- Techniques for optimized ML model selection. ML methods may include supervised and unsupervised;
- Application of ML for improved prediction, identification and validation of risk factors, modifiers and / or biomarkers of metabolic diseases.

Guest Editor

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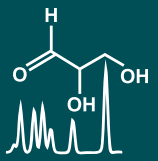

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About the Journal

Message from the Editor-in-Chief

The metabolome is the result of the combined effects of genetic and environmental influences on metabolic processes. Metabolomic studies can provide a global view of metabolism and thereby improve our understanding of the underlying biology. Advances in metabolomic technologies have shown utility for elucidating mechanisms which underlie fundamental biological processes including disease pathology. *Metabolites* is proud to be part of the development of metabolomics and we look forward to working with many of you to publish high quality metabolomic studies.

Editor-in-Chief

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